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REAUTHORIZATION OF THE NATURAL GAS PIPELINE SAFETY ACT AND THE HAZARDOUS LIQUID PIPELINE SAFETY ACT

P47-83

HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND POWER

OF THE

COMMITTEE ON COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

MARCH 9, 1995

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CONTENTS

Testimony of:
Ellsworth, Bruce B., on Behalf of the National Association of Regulatory Utility Commissioners and the National Association of Pipeline Safety Representatives .....
Franks, Hon. Bob, a Representative in Congress From the State of New Jersey .....
Hall, Larry D., on Behalf of the Interstate Natural Gas Association of America and the American Gas Association .....
Tenley, George W., Jr., Associate Administrator for Pipeline Safety, Research and Special Programs Administration, Department of Transportation .....
Thomas, L.C., on Behalf of the Association of Oil Pipe Lines and the American Petroleum Institute .....
Material submitted for the record by:
Controlotron Corp.: Statement of J. Baumoel, President .....
Gas Research Institute: Statement of Dr. Theodore L. Willke, Vice President, Operations R&D .....
Interstate Natural Gas Association of America: Letter from Larry D. Hall to Hon. Dan Schaefer, Chairman, Subcommittee on Energy and Power .....
Texas Eastern Transmission Corporation: Letter from H.D. Church to Hon. Dan Schaefer, Chairman, Subcommittee on Energy and Power .....

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REAUTHORIZATION OF THE NATURAL PIPELINE SAFETY ACT AND THE HAZ OUS LIQUID PIPELINE SAFETY ACT

THURSDAY, MARCH 9, 1995

HOUSE OF REPRESENTATIVES,
COMMITTEE ON COMMERCE.
SUBCOMMITTEE ON ENERGY AND PC
Washingto

The subcommittee met at 10:09 a.m., in room 2123, F House Office Building, Hon. Dan Schaefer (chairman) presid

Members present: Representatives Schaefer, Franks, H Crapo, Coburn, Pallone, and Manton.

Staff present: Catherine G. Van Way, majority counsel, a D. Sheridan, minority counsel.

Mr. SCHAEFER. The Subcommittee on Energy and Power vene to hold this hearing on reauthorization of the Natur and Hazardous Liquid Pipeline Safety Acts.

Mr. Pallone is on his way but we wanted to get this starte ticularly for the convenience of our good friend, the Congr from New Jersey, Mr. Franks.

Let me just thank everyone for being here this mornin hearing, as I indicated, will focus on the safety of the natu and hazardous liquid pipelines and the effectiveness of th under which they are regulated. The Natural Gas and Haz Liquid Pipeline Safety Acts both expire in September of th so I believe it is time we started examining these to see hc they are working and see what we are going to do to chang where necessary.

Natural gas pipelines consist of approximately 280,000 n transmission lines and 1.5 million miles of distribution lines country. In a year, they transport over 20 trillion cubic feet Hazardous liquid pipelines, and by this I mean oil and pet product lines, consist of over 200,000 miles of pipeline and port over 50 percent of the oil consumed annually in this c It is clear from these figures that natural gas and oil pipelir tainly play a vital role in getting a very important source markets today.

Despite the publicity that pipelines have received from rec cidents, oil and gas pipelines have a remarkable safety rec 1993, there was one fatality related to a natural gas trans line and none related to a liquid pipeline. However, because enormous potential for loss of life or harm to the environme

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a pipeline rupture, it is important that we make sure our national pipeline system operates as safely as possible.

In the past, we developed our pipeline safety laws in response to the most recent accident. If the distribution line failed, we directed the Department of Transportation to do a rulemaking on excess flow valves. If an abandoned pipeline ruptured, we had the DOT do a rulemaking on abandoned lines.

Our current pipeline safety laws are a result of layering new requirements onto old requirements. Both DOT and industry now believe we should instead take a risk-based approach to pipeline safety. DOT has proposed that it be allowed to do risk assessments before implementing new pipeline safety regulations. Industry supports doing risk assessments and also proposes that they be allowed to take a voluntary risk management approach to maintaining the safety of the lines.

The risk management approach would allow pipeline operators to tailor safety programs with the approval of DOT to their specific pipelines. This would get away from a one-size-fits-all approach to safety.

I applaud both the administration and the industry for recognizing the important role cost/benefit analysis can play in regulation. While I have some questions about the pipeline safety proposals of both DOT and industry, I generally support the concept. I believe we can continue to enhance the safety of these pipelines while keeping costs down.

Importantly, until we can find out if this approach to pipeline safety will be truly effective, existing pipeline safety regulations will remain in force. It is important that the safety record which has been achieved by gas and oil pipelines be maintained.

I look forward to the witnesses that we have here today and I will have many questions about the proposals and how they will work and if we can reduce some of the costs associated with DOT's regulation of pipeline safety, I also look forward to working with all interested parties to develop good pipeline safety legislation this year.

Now I would yield to the gentleman from New Jersey, the ranking member, Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman, and I apologize for being late. I was involved with a Democratic Caucus health care task force and unfortunately it got a little heated and I ended up having to stay there longer than I wanted to.

I do appreciate the fact that you are having this hearing today because, as you know, this issue, the whole issue of pipeline safety, is very important to me and my district, particularly in the aftermath of the Edison Natural Gas Pipeline problem that we had last year. Actually it was almost exactly a year ago that we did have the natural gas pipeline explosion in Edison and it essentially leveled the Durham Woods apartment complex and dramatically altered the lives of thousands of my constituents who never even knew that they lived near a pipeline.

In the last year, I have learned more about pipelines and pipeline safety than I could ever have imagined and I am very pleased that we are beginning the process of reauthorizing the Pipeline Safety Act of 1992 for that reason.

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Let me say that I recognize that much of our pipeline safety ulation has been disaster-driven rather than a more calculated management approach but, at the same time, I think we nee put a human face on the issue. In Edison, although there wer fatalities, hundreds of people of modest means instantly had homes and possessions ripped away from them. Many nently injured, both physically and mentally, by the bl while accidents may be few and far between, and that cer true, the potential exists for a single accident to hurt or kill dreds of people. In Edison, I think we were extremely lucky cause no one died as a direct result of the explosion but we c just as easily have had many casualties on our hands.

I think that even if we moved to a risk management regul regime and, obviously, based on some of the testimony that w going to get today and that we have received alr dy, that major priority here, we should continue to ensure t highes gree of safety possible on pipelines in populated ar I cont to believe that both the government and industry to close hard look at alternative and emerging techn automated or remote controlled fail safe valves, inc smart pigs and advanced leak detection systems. In Chairman, I would appreciate it if the manufacturers of technologies, Fail-Safe Systems and the Controlatron Corpo would be permitted to submit testimony for the record on products.

Mr. SCHAEFER. Without objection.

Mr. PALLONE. I appreciate that. Thank you.

I would urge my colleagues to review their testimony as w the recommendations of the National Transportation Safety regarding automated and remote-control valves.

I think it is perhaps even more important to address the s greatest threat to pipeline safety at this point in time and th third party damage. I see that my colleague, Bob Franks, is and I guess he is the first witness today and he is very much a of the fact that third party damage was really the major cor and the major reason, we believe, why the accident occurred in son. Oftentimes, excavators do not know what is buried ben their work site and this ignorance can lead to fatal and expe consequences.

You know I have introduced legislation, H.R. 431, that pro a simple solution to this problem. Before excavators begin di they must call a central phone number to learn whether the any underground facilities at the excavation site and facility o tors, once notified, must come to mark the site. These simple m ures can save lives, prevent property damage and prevent the for expensive repairs. This is, of course, the One-call Noti Bill.

I would point out that this bill basically requires t S es sider establishing a comprehensive one-call system. It n tain a mandate that the States adopt such a system but do vide for grants to States that do choose to institute an one-call system. The only burden on the States in the su is the consideration of these systems. I believe that once t S

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delve deeply into the issue, though, they will conclude as I have that a comprehensive one-call system is the way to go.

I also wanted to ask that my colleagues consider some recommendations and legislation that both myself and Congressman Franks have considerod. We have a second bill that contains proposals that could go a long way toward improving pipeline safety and this is H.R. 432 that requires a schedule for pipeline inspections including inspections by smart pigs, that requires automatic or remotely controlled valves be used wherever it is technically and economically feasible to do so.

You may know that the Texas Eastern Pipeline that exploded in Edison was equipped with a manual valve and it took several men almost 3 hours and 753 twists of the wheel to shut off the gas. I also think we need to consider siting issues during this process.

I don't want to go on and talk more about my legislation but I did want to say that I think we do need to take some time to look at some of these alternatives. I really want to hear from my colleague, Bob Franks, today and the other panel members.

I guess I should point out that Edison, the Township of Edison, is actually split between myself and Congressman Franks. He represents North Edison and I represent the rest of it. Durham Woods, where the explosion occurred, is actually in my district but it is so close to Bob's, I don't even think it is a mile from your district, that we have been working together in a bipartisan way on trying to address the concerns that arose in the aftermath of the explosion.

Again, if I could just thank you, Mr. Chairman, for paying attention to this issue. I know you have been involved with it before but it is very important to us. Thanks.

Mr. SCHAEFER. I thank the gentleman for his comments and I might say to the committee, before I recognize other members of the committee for opening statements in lieu of the busy schedules we have around here, I would like to recognize the gentleman from New Jersey, Mr. Franks, for his opening statement and then any comments from the members and then we will go into the rest of the opening statements.

STATEMENT OF HON. BOB FRANKS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. FRANKS OF NEW JERSEY. Mr. Chairman, thank you very much. I am delighted to be able to testify this morning on a subject that I can tell you is not routine in any way in central New Jersey. As Congressman Pallone noted, a year ago this month an explosion occurred that sent a fireball 500 feet in the air, easily seen from New York City, easily seen from the Pocono Mountains in Pennsylvania. The fact of the matter is that literally hundreds of phone calls went to local police departments asking if there had been a nuclear explosion.

The power of that explosion reduced to literally charred rubble eight large apartment buildings, or 128 units. The miracle, Mr. Chairman, is that only one person died and really it was an indirect cause. We had a number of people injured, some very severely. But given the magnitude of the explosion, it was absolutely incredible that there wasn't a greater loss of life.

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That, I think, awakened not only the area residents but Pallone and myself to the potential dangers that exist should an explosion occur. So I think that this hearing, Mr. Chairn about a subject that too many of us know too little about an education that our constituents can receive by virtue of the i mation imparted through this hearing I think can lead to very constructive developments in public policy.

I was very encouraged, Mr. Chairman, to hear your broad ou of the direction that you hope legislation can take and I think is a very competent approach and I would enjoy working with to see if we can't make that as meaningful as we possibly can as reducing the burden on the industry because I do believe it is a remarkable safety record that this industry has devel over many years.

Given the volume of natural gas that is transmitted thr these pipelines, the incredible rarity of these kinds of expl testifies to something that has obviously been done well. But Chairman, what happened in our district, between Mr. Pallor mine, demonstrate that you simply can't be too careful. We to be asking ourselves the tough questions and we need to sure that we are going the extra effort to ensure safety be people's lives and property are very directly involved in this i

So, Mr. Chairman, my bill would do a number of things. I it would increase criminal and civil penalties for anyone vio Federal pipeline safety measures. Second, it would call fo creased inspections of natural gas pipelines.

Third, it would make it a Federal crime to damage a natura pipeline and not report it because very clearly, as we look ba the history of those incidents that have occurred that have l some problem, we find that usually some excavation, some cor tor working around the site is either unknowing or careless as are working in the immediate vicinity and happens to nick pipeline and that was just recently identified as the cause o explosion at Durham Woods.

So we think it is very important that if anybody kn have, in fact, damaged one of these pipelines, we need to n absolutely mandatory that the damage be immediately report order that the appropriate action can be taken.

Lastly, Mr. Chairman, my bill would call for a risk assess to let us measure scientifically just how much of a risk is pos these pipelines, to once and for all answer some qu ion their long-term safety. I think that is a long-overdue cu I think it would be appropriate again, if nothing more tl share with the American people information about these vi u portant but potentially hazardous facilities.

Mr. Chairman, I could go into a good deal more detail, I would rather leave that to my written statement that I woul be incorporated as part of the record and I would be happy t tertain any questions.

Mr. SCHAEFER. Without objection, it will be incorporated as of the record.

[The prepared statement of Hon. Bob Franks follows:]

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PREPARED STATEMENT OF HON. BOB FRANKS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY

Mr. Chairman, I appreciate the opportunity to appear today before this subcommittee concerning the reauthorization of the Natural Gas Pipeline Safety Act and the Hazardous Liquid Pipeline Safety Act (49 U.S.C. section 60101 et seq). As a member of the House Surface Transportation Subcommittee, which also has jurisdiction over these Acts, I look forward to working with my colleagues on the House Energy and Power Subcommittee on this reauthorization.

Mr. Chairman, while many of my colleagues may consider reauthorization of the pipeline safety laws routine, I can assure you that it is of the utmost importance for my constituents. As you may recall, a year ago this month a 36-inch interstate natural gas transmission pipeline, operated by the Texas Eastern Gas Pipeline Company, exploded in Edison, New Jersey. Miraculously, only 1 person died, and 29 people were injured due to the explosion. One hundred twenty-eight units of the nearby Durham Woods condominium complex (eight apartment buildings) were destroyed. The residents of Durham Woods literally had to run for their lives in the middle of the night in order to escape the approaching inferno. When those who could return did so, they found their possessions either charred or incinerated. The blast, whose flames reached 500 feet and were visible from New York City, was so intense that many residents thought they were witnessing a nuclear explosion.

Clearly, the residents of Durham Woods were extremely fortunate. However, the more than 500 people who have died due to natural gas pipeline accidents since 1970 were not as fortunate. Clearly, greater precautions must be taken to prevent another Durham Woods-type disaster.

For this reason, last week I reintroduced legislation (H.R. 1126) entitled the "Durham Woods Natural Gas Pipeline Safety Act of 1995." My legislation, which has bipartisan support, lays the foundation to strengthen and enhance pipeline safety laws. In brief, my bill would:

—Increase criminal and civil penalties for anyone violating Federal pipeline safety standards;

—Increase inspections of natural gas pipelines;

—Make it a Federal crime to damage a natural gas pipeline and not report the damage promptly;

—Conduct an assessment of the risks to public safety and the environment posed by natural gas pipelines.

Mr. Chairman, I toured the wreckage of the Durham Woods apartment complex soon after the disaster, and it is simply miraculous that the loss of human life was not greater. I strongly believe that Congress must make the necessary changes in this upcoming reauthorization bill to better protect the millions of Americans who live and work near natural gas pipelines. To do anything less would be a disservice to the victims of the Durham Woods explosion.

Mr. Chairman, in closing, I urge the members of this subcommittee to consider the ideas contained in my legislation, and Mr. Pallone's pipeline safety bills. Thank you for your consideration of my views.

Mr. SCHAEFER. I thank the gentleman for his excellent testimony and I know that this is a serious consideration of the gentleman's and we will be working with him and with my good friend, the ranking member, on this particular issue as time goes on to see if we can better improve the Pipeline Safety Act. We also have to recognize also that approximately 60 percent of all of the problems are caused by third parties; individuals that do not know that these lines are there and therefore act inappropriately. I think that this is why one-call legislation is also very important.

I would just then yield to the gentleman from New Jersey, Mr. Pallone, and then any of the members for any questions of Mr. Franks.

Mr. PALLONE. Thank you, Mr. Chairman.

I don't want to keep you, Bob, but I just wanted to say as far as the risk assessment is concerned, and I mention it because obviously we have been dealing with this on the Floor, we passed legislation. How do you envision that coming into play? I haven't read that aspect of your bill. In other words, how—I know that the in-

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dustry representatives today and I think also the ad
have stressed that, the need for that, and have also
fact that they don't really feel that much has been d
of risk assessment in the past. I just wanted you to
comment on it if you would like.

Mr. FRANKS OF NEW JERSEY. There have been a num
sations made by people who, at one time or another,
have looked at this issue or at one time or another hav
ated with the industry who have indicated that the sh
that these gasses are transmitted via these pipelines
mous risk to the public.

Now, given the safety record, that doesn't seem to
charge but I think it is time that we undertake a sci
risk assessment to find out whether or not the means
are currently transmitting this vitally important energ
in fact protecting the public's health and safety. I think
surance through a competent risk assessment will dea
allegations that are out in the public domain, the ver
which these pipelines operate are inherently unsafe.
time that we sanction a study that will answer those
and for all.

Mr. PALLONE. I am glad you raised it because I th
we go with the different panelists today, I am going
the same question because obviously a lot of the legi
ticularly the one-call bill, came up and was actually p
House last year. But the issue of risk assessment, alth
sort of there in the past, has taken on more significar
I think we need to ask the panelists about it so thanks
it up.

Mr. SCHAEFER. Does the gentleman from Idaho, Mr.
any questions?

Mr. CRAPO. I have no questions. I have an openi
when we get to that point, Mr. Chairman.

Mr. SCHAEFER. As soon as Mr. Franks has been dism

Mr. Hastert of Illinois?

Mr. HASTERT. I have an opening statement but no q
Mr. Franks.

Mr. SCHAEFER. Mr. Franks?

Mr. FRANKS OF CONNECTICUT. Yes, thank you, Mr
Mr. Franks, I do like the sound of your last name.

Mr. FRANKS OF NEW JERSEY. It is close.

Mr. FRANKS OF CONNECTICUT. Exactly the same.

I just have one brief question. I did notice, Mr. Frank
bill is co-sponsored by Mr. Pallone and you have also
Mr. Pallone's bill.

I just wanted to have you just briefly tell the commi
ferences between the two. I know about the one, there
aspect that would differ with your bill and Mr. Pallo

Coming from the same part of the country as your
lines are of great concern not only to people from the N
everyone nationwide. But we, in the Fifth District of
were involved in the Iroquois Gas Pipeline being
through my district for the most part. So, obviously,
were all affected by the tragedy that occurred in N

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telephones went rather crazy as well in Connecticut because of the fact that people were very concerned about, even though it was a third-party type situation, they still expressed their new concern. We just had a new pipeline put in through my district to increase the capacity of energy so it was definitely on their minds.

So if you could address that to some degree, we would appreciate it.

Mr. FRANKS OF NEW JERSEY. Mr. Franks, I would be delighted to. Let me talk for just a minute what my bill focuses on and talks about some areas that are not addressed in Congressman Pallone's bill and I know, during the course of the hearing, he will have the opportunity to talk about provisions of his measure that are not contained in mine.

Mine talks about increased inspections. Mine creates a new Federal crime for not reporting damage done to these pipelines. It increases civil and criminal penalties. It mandates a study of all interstate pipelines in our home State of New Jersey. It requires a risk assessment to be undertaken, the subject that Mr. Pallone just asked about. And, lastly, it requires mandatory line markers in highly densely populated areas in order that there be some graphic exhibition of where these pipelines are located.

We found in the Durham Woods case, for example, despite being very nearby this massive apartment complex, there is no evidence that there were any line markers at the facility, there was various contracting activities going on, excavation work. There was no literal, physical demonstration that a major interstate gas pipeline existed at that location. So we talked about mandatory line markers in our legislation. So those five features are contained in ours.

Mr. FRANKS OF CONNECTICUT. Do you have a problem with the one-call aspect and, if you do?

Mr. FRANKS OF NEW JERSEY. No. As a threshold matter, one-call, I think, is essential to get us on a path toward upgrading the safety of these pipelines. There needs to be a simple mechanism through which those doing work in the area of these pipelines can learn conclusively where the nearest pipeline may be located in order to know that they are not going to be posing any potential threat to public safety. I think one-call is essential. I think it works in many States. I think Mr. Pallone's bill is an excellent step in the right direction and I would certainly strongly advocate one-call.

Mr. FRANKS OF CONNECTICUT. Thank you, Mr. Franks.

Mr. SCHAEFER. The Chair thanks our vice chairman. I now recognize, in order of appearance, Mr. Manton of New York.

Did you have any questions, sir?

Mr. MANTON. I don't have any questions but I have an opening statement at the appropriate time.

Mr. SCHAEFER. Then I would just say to the gentleman from New Jersey, you are dismissed. You have a busy schedule and have a lot of other things to do. And I would now recognize other members for opening statements.

I would also ask that, without objection, that the statement of the gentleman from Florida, Mr. Bilirakis, be submitted as part of the record.

[The prepared statement of Hon. Michael Bilirakis follows:]

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PREPARED STATEMENT OF HON. MICHAEL BILIRAKIS, A REPRESENTA
CONGRESS FROM THE STATE OF FLORIDA

Mr. Chairman: I, too, want to commend you for holding this timely
gathering hearing today as we prepare to reauthorize the Natural Gas
ous Liquid Pipeline Safety Acts.

In fact, I believe that the testimony we will hear today will help tc
threat posed by *all* types of underground facilities to public health and

As a Member of Congress with two natural gas transmission li
or currently under construction in my district, I have a particula
issues—and I look forward to the comments of our witnesses.

While I believe that most of us here teday can agree that changes a
before these two acts are reauthorized—I also feel that may be *all* we
upon. Everyone seems to have competing ideas about pipeline safety:
ment of Transportation and industry currently are developing propos
Members of Congress here today have introduced their own bills.

While today we may only dimly view the costs and benefits of
and assessment, minimum standards, line inspection, user fees, ev
and other oddities, we need hearings such as this one to sharpen ou
us to a clearer understanding of all of these issues and the part they
coherent and effective Foderal legislation.

In the previous Congress, we focused to a large degree on a comprel
call notification bill.

While I understand that this hearing is targeted more at developn
line safety authorization bill, I also know that our colleague, Mr. P
introduced one-call legislation this year.

Since almost two-thirds of all damage to underground pipelines is cau
parties—and one-call legislation is designed to minimize the risk of
damage by requiring States to create a one-call notification system—I h
will explore this idea today and in the days ahead as well.

Again, Mr. Chairman, I commend you for holding this hearing today
ward to the testimony of our witnesses.

Thank you.

Mr. SCHAEFER. I then would ask—recognize the gentle
Idaho, Mr. Crapo.

Mr. CRAPO. Thank you, Mr. Chairman. I appreciate t
tunity for us to hold this hearing and address this issu
with Representative Franks that this is not a routine iss
measure and I recognize fully the critical safety considera
this committee must consider as we review not only the l
proposed by Mr. Franks but that of Mr. Pallone and also
thorization of the National Gas Pipeline Safety Act and
ardous Liquid Pipeline Safety Act.

In that context, I simply want to say that recognizing t
ty concerns, I also believe that we have got to recognize
in the past we have assumed that we have met our resp
to these important concerns by creating a new regulato
nism or a new regulatory burden that faces the industry
not necessarily improve the safety and, for those reason
strong proponent of meaningful risk assessment and c
analysis in the areas where Federal legislation is appropri

I also think there is a question that we must answer
mittee and that is, is this a Federal case? Is this somet
requires Federal legislation or is it something that ca
managed at the state level? And I don't think that incr
eral mandates, increased Federal crimes and increased F
volvement is always the necessary solution.

I recognize that there are circumstances, particularly
where we have a need for uniformity nationwide and thi
one of those cases that justify Federal involvement. But
need to be convinced as to the various proposals that w

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dress under each of these pieces of legislation, that there is some reason why the Federal Government must step in and supersede state authority or state responsibility. As a state legislator, I have dealt with these issues. I think in many of these areas, it is very possible that the best thing to do is to leave it up to the States. But again, I say, I am aware that we have a national—literally an international economy now that we deal with and sometimes issues are sufficiently global that we need national standards.

So I am open to the argument but I believe that it is not necessarily a given and I think we have got to analyze that first question as well. Thank you.

Mr. SCHAEFER. The Chair thanks the gentleman for his very candid remarks. I would now recognize the gentleman from Illinois, Mr. Hastert.

Mr. HASTERT. I thank the chairman and certainly thank Mr. Pallone and the gentleman from New Jersey, Mr. Franks, who brought this issue up.

In the State of Illinois, we have more miles of pipeline than any other State in the union and that is curious but I guess we are the crossroads in the middle of the Nation. Everything that comes up from New Orleans and from Texas and from the west and goes to the east, crosses right through the very center of our State.

It is interesting that we have had very, very few problems with pipelines. The reason is because Illinois has a program called JULIE, which is a voluntary call system, not just for pipelines but for telephone trunklines and for electric cable lines. It is a voluntary system.

Over this last year, we have had over 800,000 calls to the JULIE system and very, very, very few accidents. No pipeline accidents, incidentally.

It is a voluntary system. It is the most-used system in the Nation. One of the things I had heard Mr. Franks say is that he thinks it ought to be a Federal law. One of the things that I would think in my mind, that if you start to make it a Federal offense, these people who accidentally hit a pipeline, who aren't usually the professional contractors, but someone doing some work for a neighbor in the backyard or a guy who has a backhoe and he makes a part-time living, these are the guys that sometimes are the perpetrators.

If you make it a Federal offense, you'll never get any calls and these guys will cover up their mistakes and run away as fast as they can and I think that would be a real travesty.

We have to think before we put too many Federal rules and regulations on these testing things, let's think of the alternatives. Living in the suburban, mixed rural area that I represent, we can have pipelines that move gasoline and liquid petroleum and natural gas and crude oil, all of them going through my district. Or you could have airplane tankers flying overhead carrying this stuff instead or you could have tank trucks rambling through your streets and towns carrying this product. Or you could have strings and strings of railroad cars going through the main line of every little town and village that you have in your district carrying this product back and forth.

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Unless we don't need gasoline, unless we don't need fuel oi less we don't need natural gas to heat our homes and to fue industries, then we need to find the safest way and the mos ductive way to move this product. And the safest way and the productive way to move the product is by pipeline. So let's lo that fact.

Let's say, how can we make sure that the product moves through the pipeline? The people who own the pipelines an people who own the product. They have a great liability loss if don't do their job, they have a huge financial loss if their pr doesn't meet the customer and, they are the people who are mately responsible, let's make them responsible for that.

I have been through pipeline tours and I can't say that I smart pig but I have watched smart pigs. They are good, th the job. And the people who develop them, the people that hav biggest stake in them are the people who are the propriet those businesses.

I have seen manual valves and automatic valves and the a lot of times when you have a real problem and you have e sive heat and you have this fire blasting out when a problem ops, the automatic valves don't work. That's a problem too. of times, all of this automatic stuff isn't always the answer.

We need to let the experts out there, the people who under the system, run the system and be liable for it under the la we have in this country and we have to be very, very about what type of Federal overlays and Federal laws that w on top of these people who are providing this service. I woul say that when you start to look at the accidents per million gallons or million gallon-miles, excuse me, Mr. Chairman, wh you look at all the alternatives, that the pipelines have the record by a landslide. It is not perfect, we need to make it but we need to put the impetus and the parameters out t that the people who run those pipelines can have the abi make it better.

Mr. SCHAEFER. The Chair thanks the gentleman from Illinc his excellent opening remarks.

I would now recognize the gentleman from Connecticut Franks.

Mr. FRANKS OF CONNECTICUT. Yes, Mr. Chairman. In an to move the hearing along, I will just ask unanimous conse have my opening statement included in the record.

Mr. SCHAEFER. Without objection.

The Chair would recognize the gentleman from New York Manton.

Mr. MANTON. I thank the chairman.

I am pleased to be here today to join in this hearing conce the Nation's pipeline safety laws. This is clearly an important and I thank the chairman for holding this hearing.

As I am sure you are all aware, there have been a number cidents involving pipeline accidents in and around the New harbor. I am concerned about these accidents and their eco and environmental impact. I am particularly troubled by the p tial danger these accidents pose to the public.

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My district, which is located 1,000 yards across the East River from the United Nations and which contains LaGuardia Airport, has a pipeline called the Buckeye Pipeline, which transports jet fuel, and services LaGuardia and JFK. This pipeline runs through very densely populated areas as well as along some railroad rights of way. A lot of this pipeline goes through territory populated by one- to two-family homes and small apartment buildings. I recognize that the danger factor is always present. Thank God we have never had an accident.

I look forward to learning more about the various proposals offered by the Department of Transportation, industry and my colleagues Mr. Pallone and Mr. Franks. I sincerely hope that our efforts in reauthorizing the Natural Gas Pipeline Safety Act and the Hazardous Liquid Pipeline Safety Act result in a reduction in the number of natural gas explosions and leaks that contaminate our Nation's waterways. I look forward to hearing from the witnesses and I yield back the balance of my time.

Mr. SCHAEFER. I thank the gentleman from New York.

I would recognize the gentleman from Oklahoma, Mr. Coburn.

Mr. COBURN. Thank you, Mr. Chairman. I just would concur with the gentleman from Illinois and his comments. I think this is one of the programs that is not broken and I don't think it requires any additional fix. But I am anxious to hear what both Congressman Franks as well as the industry have to say about this issue.

Thank you, I yield back.

Mr. SCHAEFER. The Chair thanks the gentleman. Now we would like to welcome our first witness, Mr. Tenley, the Administrator of the Office of Pipeline Safety at the Department of Transportation.

Mr. Tenley, before you begin your testimony, I would like to note that this is likely the last time you will be testifying in front of this committee as an employee of the Department of Transportation. I believe that you are planning on moving on to other endeavors in the next few weeks.

I note that Mr. Tenley has been with the Office of Pipeline Safety since 1989 and with the Department of Transportation since 1976. Since he has been at the Department of Transportation, he has received—and I want to make sure everyone knows this—the Presidential Rank Award, the Senior Executive Service Performance Award a number of times, and the Secretary's Award for Meritorious Achievement.

He has also, Mr. Tenley, contributed much to the Department, and its development of pipeline safety regulations. He has a very solid reputation. I am sure he is going to be greatly missed by the Department and I know this committee will also miss him.

STATEMENT OF GEORGE W. TENLEY, JR., ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY, RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Mr. TENLEY. That was very kind and very generous, Mr. Chairman. I couldn't go out on any higher note and I will long remember those remarks. Thank you very much.

Good morning, Mr. Chairman and members of the committee. I am George W. Tenley, Jr., Associate Administrator for Pipeline

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Safety in the Department of Transportation's Research and
Programs Administration, a post that I have held for 5 yea
chairman noted.

Joining me today is Kelley Coyner, RSPA's head of policy

Looking back on my 5 years in the Office of Pipeline S
have seen an enormous increase in the attention being
pipelines and pipeline safety by Congress, the Departme
and local governments and the public. This increased atten
brought new concerns, new Federal mandates and new op
ties. Fortunately, through the efforts of Secretary Pena a
gress, the attention has also brought new resources with
confront important issues of pipeline safety and environn
tegrity.

As we begin the public policy debate that will result in t
thorization of this important transportation program, I th
essential that all of us engaged in that debate understand
are at a critical juncture in pipeline safety regulation a
sight. There are wonderful opportunities to improve the
environmental soundness of the Nation's pipelines throug
way of looking at how we invest our resources, set our g
measure our progress. The challenge for all of us is to craft
egy for continual improvement that gives to the industry t
mum discretion practical in making safety and environmen
sions while assuring that both the Federal and state gov
have the resources and technical knowledge to be able to
the credible assurance to the public that we know what t
are and that what the industry is doing to control them is

The means to meet these challenges and to realize the op
ties that exist is, I believe, risk management. While I a
that the terms risk, risk assessment and risk managemer
vogue right now and are being used in a multitude of ar
the term risk management to define an organizational
process and decisionmaking model. In other words, in the
context, risk management is more than a tool for comply
minimum Federal safety standards it is the totality of thou
action that goes into running a pipeline or running a gov
pipeline safety program.

Risk management as a means of doing business and
business accountable is predicated on three essentials. O
data based on the development and deployment of sou
nology that can both determine the risks and assess the s
the means chosen to address those risks. Two, a commitme
vesting in safety and environmental protection, not merely
ing for the cost of those goals in the corporate balance she
third, more than anything else, trust between all parties in
of mutually agreed upon and evaluated actions. I am e
proud of how we in the Department have seized the new op
ties that are out there and I am gratified that the industry
mitting increasingly to strengthening the pipeline infras
We are working together in partnership and all aspects
management, development and implementation. By the en
year, we will have produced a road map for risk manage
pipeline safety.

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As we seek more opportunities to work collaboratively and to expand the membership in our partnerships to include more diverse points of view, I am confident that the principles of risk management will produce a pipeline system in which continual improvement is not only good for safety but good for business. And, Mr. Chairman, although the Department's reauthorization bill has not been submitted yet, Ms. Coyner and I look forward to discussing with you and your colleagues these important issues of pipeline safety.

Again, thank you very much for that very warm and generous welcome.

[The prepared statement of George W. Tenley, Jr., follows:]

PREPARED STATEMENT OF GEORGE W. TENLEY, JR., ASSOCIATE ADMINISTRATOR FOR PIPELINE SAFETY, RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, DEPARTMENT OF TRANSPORTATION

Mr. Chairman and members of the subcommittee: Good morning. It is a pleasure to testify before you today on behalf of the Research and Special Programs Administration, and our Administrator, Dr. D.K. Sharma, concerning reauthorization of the pipeline safety program.

During the last few years, we have experienced a number of serious pipeline incidents, including: the diesel oil spill in Fairfax County, Virginia, the devastating explosion of a high-pressure natural gas transmission pipeline in Edison, New Jersey, and the massive damage to a number of hazardous liquid pipelines caused by the Houston floods last fall. These incidents have demonstrated that the inherent risks posed by pipeline transportation can have serious safety and environmental consequences. As a result, the Federal Government must work with the pipeline industry to help ensure that the risks to the public and the environment inherent in pipeline transportation are minimized to the maximum extent practical.

Mr. Chairman, the Secretary, Dr. Sharma, and I are committed to developing even closer partnerships with industry, the States, and the public to help ensure the integrity of our pipeline infrastructure. Pipeline safety remains a critical public policy issue and is recognized as such by the Department's leadership. Secretary Peña is deeply interested in pipeline safety issues and has recognized the importance of pipelines as a mode of transportation by including them in his National Transportation System initiative. Last year, the Secretary led the first-ever pipeline safety summit. Moreover, he played the key role in securing much needed funding authority to dramatically increase the Department's pipeline technical competence. This improved knowledge is necessary to ensure that we are a credible and independent assessor of the pipeline infrastructure and industry's efforts to minimize the inherent risks of pipeline transportation.

In the year since the Edison explosion, we have addressed a number of key areas of pipeline safety. For example, we completed review and approval of more than 1,100 pipeline operator oil spill response plans submitted under the Oil Pollution Act of 1990. This initiative is a model for government-industry partnerships in safety and environmental protection, and all of our reviews and approvals were completed on or before the required deadlines. We issued final rules regarding: (1) hydrostatic testing of previously untested hazardous liquid pipelines; (2) safety requirements for previously unregulated, low-stress hazardous liquid pipelines; (3) internal inspection of new and replaced pipelines; and improved pipeline operator damage prevention programs. We also have pending rulemakings designed to enhance the safety of certain gas service lines, and improve pipeline operator qualification and training programs.

Finally, on behalf of Dr. Sharma, I would like to announce the Department's decision on the excess flow valve (EFV) rulemaking. After a thorough regulatory evaluation, we have decided not to issue a final rule requiring the installation of excess flow valves on certain gas service lines. Rather, in accordance with the provisions of the Pipeline Safety Act of 1992, we are planning to issue technical specifications for excess flow valves. Because there are no industry standards, these performance standards will ensure that excess flow valves operate safely and reliably. In addition, we intend to propose a requirement that pipeline operators notify their customers of the availability of excess flow valves. We believe that these approaches contribute to a sensible regulatory system that protects the American people without imposing unnecessary costs on society.

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Our goal now is to build upon these successes by continuing to work with ind and others to ensure that pipelines remain a safe and environmentally sound tra portation system for much of America's energy needs. To do this, we mu conti the shift away from traditional "command-and-control" regulatory s by tering the further development of risk management techniques in u saf It is important to recognize, however, that our version of risk from the Environmental Protection Agency and Food and Drug Admin. hazard models.

Risk management has numerous advantages over traditional regulatory proaches. It acknowledges the unique nature of pipeline systems and pipeline s ments. It places more of the right kind of pipeline safety decisionmaking with pipeline industry, which has the greatest understanding of the risks inherent pipeline transportation and the methods available to mitigate those risks. It all the government to leverage its available resources to the areas with the greatest tential for risk reduction.

Risk management also frees industry and government from only using "minim safety standards" to judge whether operators are making the best decisions their systems. At the same time, it enables government to better understand and why industry makes certain safety decisions, and yields better data about cific pipeline systems and the unique risks generated and faced by those sy

Finally, risk management allows government to employ positive performa measures to judge industry performance. Rather than dictating requirements t may not minimize risks in all situations, industry can use the best means pract to continually meet risk assessment standards, thereby achieving steady impro ments in the integrity of pipeline systems.

Currently, we have a number of important risk-based initiatives under way. have created partnerships with the pipeline industry and various Federal, State local government agencies to develop the foundation for risk management cri for pipeline transportation. These criteria will be based upon a number of tions, including that: (1) each pipeline system is distinct; (2) each risk does not the same probability of occurrence and consequence; and (3) given the right t and the maximum technical discretion possible, the pipeline industry will do w is right to preserve these vital economic lifelines.

We have created a multi-interest, multi-disciplinary team of industry and gove ment representatives to develop the basic elements of a national mapping progr Improved mapping capabilities will enable us, among other things, to assess the tential consequences of pipeline failures. This will be accomplished by noting the lationships between pipelines and environmentally sensitive areas, population economic centers, critical transportation infrastructures, and other important tems.

We are building a program to prioritize risks, the solutions for those risks, cost of any solution, and our response to those risks. We also are working with pipeline industry to develop a collaborative research agenda for pipeline safety. working with industry to focus research efforts, we will eliminate duplication inefficiency, while pursuing those technologies that have the greatest payoff for suring the integrity of pipelines.

In our reauthorization bill, we will seek a risk management framework that enable Congress to direct us to examine issues, while reserving to the Dep the discretion to determine how best to address those issues. This is similar approach we plan to adopt with industry—we set the performance stand provide oversight while allowing industry to determine the best means for those standards. This approach recognizes that regulations are not always priate, and that various pipelines and pipeline segments may not require the regulatory requirements.

Finally, we will aggressively pursue passage of comprehensive on-call legislat This legislation, and the Federal and State efforts it will stimulate, is critical to dressing the primary threat to pipeline integrity—damage caused by excavation. though we may offer some technical changes, we believe that the legislation rein duced this session contains the necessary elements for fostering effective State call programs.

Mr. Chairman, I am very enthusiastic about the future of the pipeline safety gram. I look forward to further developing our partnerships with industry, other els of government, and the public. RSPA is looking forward to developing and ploying a new policy and decisionmaking framework that effectively manages risks inherent in pipeline transportation, and ensures that the American people properly protected from those risks.

Thank you for the opportunity to appear before you today, and I will be pl to answer any questions that you may have.

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Thank you.

Mr. SCHAEFER. We certainly appreciate the gentleman and his testimony and his past testimony in front of this committee.

I would just ask a couple of questions here.

Who has the prime responsibility for pipeline safety? Is it the pipelines themselves or DOT?

Mr. TENLEY. The pipeline operator, without question.

Mr. SCHAEFER. Do you concur with the fact that most of the accidents or at least 60 percent are by third party?

Mr. TENLEY. It varies over time. I would say if you would look at the trend over the last 5 years, the number is lower than 60 but it is still the principal cause of pipeline failures, both acute and chronic.

Mr. SCHAEFER. What would be your suggestions to trying to eliminate this type of accident as much as possible? The gentleman from New Jersey had mentioned in his bill about staking out the areas in which these pipelines are. What can we do to make sure or to try and eliminate as much as possible third party accidents?

Mr. TENLEY. I think without question the major effort that both state and Federal Government can do is the one-call system that you have heard some information about. It is a vital communication link that is efficient, it saves money, it saves time and it can save pipeline failure so I think we have to have one-call systems in the United States.

I historically fought some one-call enhancements at the Federal level because they were too often put merely on the pipeline program and did not look at cable TV, sewer, water, whatever. But the approach that has been taken in Congress the last year, I believe, is getting at the notion of the comprehensive approach because any system that fails underground can affect any other system as well as systems above ground. So without question, the Department supports very fully the one-call initiative.

Mr. SCHAEFER. Taking into consideration the one-call approach of last year, would you say that this was a good solution or should we modify it or change it in any way?

Mr. TENLEY. I believe overall the underlying premises of that bill are sound and the right ones. Where we might have some technical adjustments that we might make for some of the reasons that have been brought up in the statements and questions already, overall the approach is what we think to be the right approach.

Mr. SCHAEFER. What about the risk management proposal of industry? Could you comment on that, please?

Mr. TENLEY. As you know, the Department has not taken a formal position and I have not really taken it apart thoroughly. I will say this, because it is what we are here today to talk about, you know, we have a bill that will be coming up, Mr. Franks described his bill, Mr. Pallone has a bill and the industry has a bill.

I can definitely tell you what I think ought to be in reauthorization. I think there needs to be an acknowledgement of the maximum flexibility in the industry to do the right thing on the pipelines. They have most of the experts, they have most of the knowledge and they should do the right thing. I would not want to see a reauthorization bill that continues to constrain the Department.

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I think we have been suffering under too many mandat
sponse to specific accidents as has been mentioned.

By the same token, as Mr. Franks pointed out, kn
understanding is critical here and my office is too far t
learning curve. We have got to be smarter and we have
able to know that what the industry is doing is the corr
so that we can assure the public that what they are doi
right thing. When we can do that well, the industry benefi
we are not credible, the industry is not credible.

Whatever reauthorization does, it has to work to stren
partnership, not constrain it. I would say those elements
cal and I believe the Department needs a funding level tl
quate to do this. I know there is a great debate building
much is necessary for pipeline safety and, of course, we
pared to engage in that debate.

If reauthorization can do those principal things, I thin
have an effective pipeline safety program in the future.

Mr. SCHAEFER. To expand on that statement just a bit,
you received an $18.4 million increase in your funding
was roughly doubling your budget. In FY 96, you are ask
$4.1 million increase over that.

Could you prioritize the 1996 request for us by importa
tivity?

Mr. TENLEY. You can look at that money, with the ex
the annualizing of the positions, I think you can look at th
the balance of about $4.1 million in the areas of risk ma
and knowledge. We need to know more about the con
of risk. We have heard mention made of the pipeli
and it certainly is an incredibly good, I believe, s
record.

But the Texas Eastern Pipeline in New Jersey was in c
with all of our regulations and it still blew up and alm
2,000 people so I don't think just compliance with safety
and the data that comes out of that is sufficient and I
industry recognizes that as well.

So the idea of gaining the knowledge necessary to know
line system, which is aging, is being appropriately atten
any given area is critical. So our budget is about ga
knowledge necessary for this program to be able to assu
confidence in this important economic and transportatio

Mr. SCHAEFER. I have one final question, Mr. Tenley.

What methodology does DOT use to assess user fees? C
explain to the committee how the methodology was develo
it based on miles of pipe or what? How was the formul
out?

Mr. TENLEY. In 1985 when the user fee bill was passed,
provided an alternative for how we might do that and w
presume to, on our own, decide that so we went out with
to the public and we went to the industry primarily and
question, "What would be the best way to do this?" The ov
ing response that we got was on a per-mile basis. It is ad
tively simple for them, it is administratively simple for u
have, since that time, used a per-mile basis.

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There have been companies, some companies that operate smaller diameter pipe that have made the argument that it should be on a volumetric basis. We have not pursued that. I think we should be committed now to reexamine the question. I think any judgment that was made 10 years ago should be subject to reexamination and we will be looking at that but right now it is on a per-mile basis as it always has been.

Mr. SCHAEFER. So you have not looked at the pipe diameters before as far as assessing the user fee?

Mr. TENLEY. No, we have not.

Mr. SCHAEFER. In other words, you don't look at how many cubic feet of gas goes through them?

Mr. TENLEY. We have not; you are correct.

Mr. SCHAEFER. But you think that would be something you would want to look at?

Mr. TENLEY. I think it bears examination like a lot of other judgments we have made in this program over the years. It invites reexamination, I believe.

Mr. SCHAEFER. Thank you, Mr. Tenley.

I now recognize the gentleman, my ranking member from New Jersey, Mr. Pallone.

Mr. PALLONE. Thank you, Mr. Chairman. I wanted to say to Mr. Tenley, thank him again as I have in the past for his response when we had the Edison accident. You were certainly there immediately and, you know, everything that you followed up on was very thorough and I certainly appreciate that. I know many from the area have said the same thing to you.

I wanted to respond, if I could, to the concerns that were expressed by the gentleman from Illinois and I think also the gentleman from Oklahoma about Federal mandates. As you know, the one-call bill that actually passed the House, my bill last session, did not have a Federal mandate actually. In fact, I said in the opening statement that it basically didn't require the States to do anything but consider a one-call system but they provided grants if they did put it into place and tried to set up a framework nationally so that the systems were pretty much uniform, because we have had—although most States have them, almost all States have them, there is quite a bit of difference between them.

Would you—is your office basically supportive of that approach as opposed to an outright mandate? Do you think that is the way to go?

Mr. TENLEY. We support it very strongly and, as you may remember, your staff certainly worked with us in negotiating the bill. We had some concerns about constitutional Tenth Amendment issues. We worked those out. We found a way to use grant funding to help provide an incentive as opposed to a disincentive and I believe that the premise of the bill that you sponsored and the approach that most of the committees that have dealt with this are taking is the right approach.

As I say, we have some minor adjustments perhaps on the margins but the bill is the way to go we believe.

Mr. PALLONE. Thank you, I appreciate that.

The other thing I wanted to ask was the status of the OPS's digital mapping proposal. I think that is very important, that it be

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done. I noticed Secretary Peña mentioned that several times after the Edison accident.

I guess there has been some question about—some concerns I suppose on behalf of some of the industry people and I just wanted to take out my notes here a second where there was—and ask you a question about that.

Apparently some of the industry and I guess even the National Transportation Safety Board has raised concerns about OPS's data management and the industry has said, in fact, that OPS has been provided with extensive information on their systems yet the Office is still not able to produce information on demand, oftentimes resorting to re-requesting the information from industry as situations arise.

Tell us about the status of this mapping proposal but also the concerns that have been raised that I guess you don't have an adequate mapping system and that oftentimes you have to go back to industry and that we are reacting on a case-by-case basis. Is this why you are moving in this direction and where are we now?

Mr. TENLEY. In 1988, Congress first addressed this subject and there were provisions in the 1988 Reauthorization Act that would require us to do a rulemaking in which we would capture a lot of inventory and mapping data and create a national system. We have had problem with that regulation because we could never show through a regulatory evaluation and a cost/benefit analysis that it was a positive cost/benefit to show keeping a map was going to save a life or prevent an injury.

We struggled with that until we came up with the approach that technology is allowing us to come up with, which is a mapping initiative. You mentioned digitizing and GIS. I think that is down the road. I think right now what we are doing, and we certainly learned from our industry brethren that we don't need to build a Cadillac when a Ford will do the job and we are working very carefully with both the liquid industry and the gas industry on what is the basic locational information the Department of Transportation needs in order to be able to depict the location of pipelines in the United States.

So, ultimately, what that mapping system will look like is going to have to await the work of this team. This team is a very aggressive team, it meets every month. It has a deadline of about 10 months from now, I believe, to produce recommendations for what this should look like.

But there is a glaring lack of locational data that we need for risk management, for oil spill response, for defining environmentally sensitive areas, all of which we will supply the industry. We are not asking industry to give us that data; we just want locational information. We have a role, we believe, to synthesize the various approaches that are out there. No two operators do it the same way and I think the Federal role here is to synthesize this and come up with a standard that is meaningful, that does the job and is not overly expensive or burdensome.

Mr. PALLONE. Lastly, on the risk assessment, when this committee considered, the overall committee, Commerce, considered the risk assessment bill, there was concern on behalf of some of the Democrats about the way the legislation was phrased.

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One of the things that I stressed that I thought that agencies needed a lot more flexibility in terms of how they impose risk assessment and I didn't think there was sufficient flexibility in the bill the committee passed and that ultimately passed in the House.

I know you are in favor of risk assessment, I am in favor of risk assessment, the industry is in favor of risk assessment but it seems to me, you know, from some of your written testimony and some of the industry's written testimony which I am looking at here that there is a big difference in approaches. You seem to be saying that you are already doing risk assessment and you want flexibility; they seem to be saying that they want everything that is already on the books reviewed again on a different point of view for risk assessment.

Would you just comment on that, because I know they will probably talk about it later but I would like your input.

Mr. TENLEY. Again, in the absence of a departmental position, I will make personal remarks. I have read the bill, I have not studied it as I would in providing, for example, negotiation or technical drafting assistance with the committee. My concern about the risk assessment in the industry's bill is that it is too constraining, that it does not provide the flexibility that I mentioned as the critical cornerstone of any reauthorization that we come out with. It has the potential, I believe, to keep us captive to information that we don't have and basically prevent us from taking actions that we need to take.

Believe me, I am not a regulator who wants to regulate. I want to have pipeline safety and I don't think a regulation is an answer to every problem. In fact, I think there are many more solutions than there are regulations that we could think of in this room.

But I am very concerned that the language is too constraining and not flexible enough. There is much in the industry bill that I think has merit and I think ought to be pursued but that particular position—again, I have not taken it apart, but my initial read is it is too constraining.

Mr. PALLONE. George, just give me an example of how that would present a problem if you could. In other words, the lack of flexibility.

Mr. TENLEY. The problem is when we do—you have heard some criticisms about our data and you will hear criticisms about our regulatory program. One of the problems is that in regulated industry, in 99 percent of the cases, the only information we get to regulate this industry is from this industry and I see it as perhaps too constraining in our knowledge base to be able to take actions that we need to take.

While it is limited to what is called significant regulations and, again, I have not seen all the limitations, regulation of a million dollar's impact could be seen as a significant regulation. Even the most minimalist regulations in the United States today cost more than a million dollars so I see that as being overly constraining.

It talks about doing risk assessments on the best science available. Well, there are some efforts to cut my program and cut the funding in our program. If we don't have the best science available then we can't make those decisions so I think that is an issue as well.

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It really comes back to knowledge and comes ba to da comes back to the flexibility to be able to act. We r strained in the past because someone else has told u wna and how to do it and we have not been allowed to come gram of I think vision and impact and I think that needs to c

Mr. PALLONE. OK, thank you.

Thank you, Mr. Chairman.

Mr. SCHAEFER. I thank the gentleman.

The Chair would recognize the gentleman from Connecticu Franks.

Mr. FRANKS OF CONNECTICUT. Thank you, Mr. Chairman.

You had mentioned earlier, Mr. Tenley, that we have things smarter. Well, could you give us an idea of the most e pipeline safety technology that is currently being develo ?

Mr. TENLEY. There has long been a debate about the ment of an internal inspection device or a smart pig that co cate cracks in pipe. Typically and historically to deal with or fatigue-like potentials in pipelines, we have had to do static testing of that pipeline.

In this day of heightened environmental concerns, it is oft ficult for an operator to get water and it is difficult for an o to dispose of that water after it has been contaminated. So ternative to hydrostatic testing is technology that needs to veloped.

We are on the threshold, I believe, of having internal ins devices which can detect cracks in a pipeline which will from that environmental concern. I would say that is very e technology.

Mr. FRANKS OF CONNECTICUT. That is the most exciting? the——

Mr. TENLEY. There are a lot of things on the horizon. T ability to spot oil plumes——

Mr. FRANKS OF CONNECTICUT. You don't ask, you never fi right?

Mr. TENLEY. That is right.

Mr. FRANKS OF CONNECTICUT. Go ahead.

Mr. TENLEY. There is technology that with overflights of line right of way, you can see oil in the ground that is may leaking that is not on the surface yet that might not show leak detection. There is technology for sensing on a pipeli has been struck by third party excavating equipment that i ing technology.

Mr. FRANKS OF CONNECTICUT. Who is responsible for dev this technology?

Mr. TENLEY. By and large, it is the industry's commitmen out and develop it and to make it happen. As was said chairman, I believe, pig vendors, for example, the people velop pigs, it is in their interest to develop the best pigs p so they can establish a market for their equipment.

Mr. FRANKS OF CONNECTICUT. Your office, the Office of P Safety has been criticized for the way it would gather and r information. How do you respond to the criticism?

Mr. TENLEY. That is a very valid criticism. For example, talking about an aging infrastructure that on a varying

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be as old as 80 or 90 years old and as recent as 10 years old and yet we don't have data on the age of pipelines. So there are data elements that we need that we don't have and there is data that we collect that we don't use and probably don't need.

Because of that, we are working with the industry on a baseline data project to try to identify just what data the industry needs and uses and then try to reconcile that as much as we can with what we need so we can get to the true data that we need to do this job. So the criticisms, I think, are very valid but, again, even if the data were as good as it can be, it is still compliance-based data which I don't think tells the true picture of the infrastructure.

Mr. FRANKS OF CONNECTICUT. So you are working on trying to, obviously, remedy these?

Mr. TENLEY. Yes, very closely with the industry.

Mr. FRANKS OF CONNECTICUT. My last question, Mr. Tenley, would be on, once again, the FY 95 budget. You increased your grants to States to about $12 million and now you are requesting an additional $3 million. Can you make any comments about who would be the main beneficiaries of these States' programs and any other related——

Mr. TENLEY. The main beneficiary is the consumer because the state program, of course, is closest to the consumer of the products that we are talking about.

The increase is a base grant program, which is our traditional safety program, is to assure we can keep the contract under the law, which is 50 percent, so we make sure we do not increase or sustain unfunded mandates. Every regulation we adopt has to be adopted by our state partners and if we are going to do that to them, we should pay for that and we have tried for 2½ decades to give funding to the States adequate to that challenge.

The other funding in the grant program, $1.8 million, is to conduct risk profiles in the States to get, as I said earlier, at the consequence side of risk. We have got to know more about the consequences. The data that we have tends to be probability data but it doesn't tell us much about consequence. That would greatly improve our consequence data.

Mr. FRANKS OF CONNECTICUT. Will the local distribution companies participate in this effort?

Mr. TENLEY. Will they participate in the data gathering?

Mr. FRANKS OF CONNECTICUT. Yes.

Mr. TENLEY. Hopefully.

Mr. FRANKS OF CONNECTICUT. Well, the data gathering, contribute toward it. Do they contribute to——

Mr. TENLEY. Do they pay a user fee?

Mr. FRANKS OF CONNECTICUT. Yes.

Mr. TENLEY. No. The distribution industry does not pay a user fee; the user fee is assessed against transmission gas pipelines and hazardous liquid pipelines, not distribution gas.

Mr. FRANKS OF CONNECTICUT. Thank you, Mr. Chairman.

Mr. SCHAEFER. The Chair thanks the gentleman.

The gentleman from New York, Mr. Manton.

Mr. MANTON. I thank the chairman.

Mr. Tenley, what technology should operators use to enhance safety in populated areas?

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Mr. TENLEY. The technologies that are available, certai internal inspection, the smart pigging that I mentioned. A there are some exciting possibilities on the horizon for hanced use of that technology.

There is some basic technology which is very effective a is for achieving corrosion control through cathodic prote pipelines to prevent corrosion.

The human side of patrolling your pipelines is frequently to know that there is activity going on around your pipelin can either be present or to assure that no damage is done pipeline.

Those are the principal things that pipeline operators There are other things they can do, I think, if they have t tive to do it where it is needed most and not be requir where it is needed least and I think that equation is wna trying to work out in our risk management work.

Mr. MANTON. Finally, what mechanisms does OPS have for tracking population growth and development around rights of way and how often is that data updated?

Mr. TENLEY. We don't have any data as such on that. We a requirement in the gas regulations in which an operato determine—stay abreast of the population development their lines because once the population increases to a certa they have to make operating changes in their pipeline to a date the greater risk created by the encroachment of peop is an obligation that we put on the operator.

We do not have a database which tells us population e ments on the systems that we are responsible for.

Mr. MANTON. Thank you, Mr. Tenley.

Mr. SCHAEFER. I thank the gentleman.

Mr. Tenley, a couple of other questions here.

How have you recognized that the pipeline industry has ated with you in the past? Has this been a good cooperativ

Mr. TENLEY. I would say that you reflected on my 5 year ever success I have had in those 5 years, I could have ne achieved without the cooperation and the partnerships built with the industry. I can't say enough about the wi of the leadership of the pipeline industry to come after tl openly, honestly and try to work with us in a very posit It is the hope, I believe, for the future of pipeline safety.

Mr. SCHAEFER. I thank the gentleman.

I just have one other question. I have a chart here tha the user fee on gas transmission over a period of time sir and in 1986 it was $23.99 per mile and all of a sudden, we 1994, it is $44.94 and then jumps to $97 in 1995 and t in 1996.

In saying that, then I looked at the budget that was re and I am referring to the RSPA FY 1996 budget submiss in it, it goes through in detail "travel," "transportation," " et cetera, which I can understand because it is outlined. get down into "other services" and "other services" in 199 are $2.4 million but that jumps in 1995 to $15.2 million. a tremendous jump in other services.

What are other services?

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Mr. TENLEY. Well, that's staggered. Excuse me, let me see if I can, off the chart that I brought, let me see if I can find that because that is a staggering comparison.

Our budget we typically depict administrative expenses, personnel compensation to pay our people, our program funds and our R&D and grants. When you mentioned the $2 million, I see that as administrative expenses. That is how we travel, that is how we equip our offices, that is how we do it. So the title that you are using at 15.2 is not a title or a funding amount that I am familiar with.

Mr. SCHAEFER. I have personnel compensation here, Mr. Tenley.

Mr. TENLEY. Right.

Mr. SCHAEFER. And it comes on down and it goes through consulting services, printing and reproduction, transportation, communications, benefits for personnel, et cetera. Then it comes to 25.2, it says "other services" and that is $2.4 million in 1994 actual, goes to $15.2 million in 1995 and then would revert back to $14 million in the 1996 request. I guess what I am trying to find out is why do we have a $13 million increase in other services and what are these services?

Mr. TENLEY. Mr. Chairman, I apologize. I had hoped to get through this hearing without having to say, "I'd like to supply that for the record," but that is so beyond my understanding of my budget and how I presented it that I will have to make that reconciliation for you on the record. I do apologize that I can't tell you that.

Mr. SCHAEFER. The committee would like to have that specified for us so that we know what the "other services" is and mainly because of the tremendous increase of that category received.

I would yield any more questions to the gentleman from New Jersey.

Mr. PALLONE. Thank you, Mr. Chairman.

Following up on what the chairman said, I did notice that there was a significant increase in fees from $45 per mile to $97 per mile, I guess, from one year to the next and then to $110 per mile under the fiscal 1996 proposal for DOT and significantly more money.

Tell us a little bit about what the reason is. Is this—are we going to have more inspectors? I mean, that is what I would hope for. What is the rationale?

Why such a major increase in the fees and the amount of money requested.

Mr. TENLEY. Well as I——

Mr. PALLONE. Looking at the chart, it is like the graph goes directly up.

Mr. TENLEY. As we prepared for this hearing and as I leave the scene and we introduce new leadership in the agency, Ms. Coyner and I split up how we are going to take on the questions today. She will be handling the user fee question.

I would like to introduce to the committee Ms. Kelley Coyner, our Head of Policy in RSPA.

Ms. COYNER. I think it is important to look at the user fee issue in the context of the overall maturity of the program. In the 1980's, we had a very small program. We had 35 to 40 people to cover the

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entire United States. If you look at it in terms of the
miles of pipeline that are in the United States, there is n
we could adequately look at the inspection issues that y
Mr. Pallone, or consider the risk factors that are unde
ation.

The accidents that happened in recent years sparked
in looking at the pipeline program. We are still looking
modest program. If we have total staffing, it would be 1
once again for the entire United States.

The user fee is based on the appropriate levels that
gives us. In other words, we get our—we are 100 percer
funded, which is different than a lot of other programs.
sets an appropriations level and then we establish our
In other words, Congress looks at what we are doing
these areas before we determine our user fees.

We don't have discretion to decide that we are going
$45 user fee or a $96 user fee or a $105 one. It is to s
program that Congress is giving appropriations for.

Last year, and I will ask George to help me out on
make this transition, we were given a significant inc
appropriations and it was, in particular, directed at the
level. We had 33 new slots. That will bring us to a tot
this is the transition, 70—is that right?

Mr. PALLONE. You are basically doubling the amount
tors essentially that go out in the field?

Mr. TENLEY. That is right.

Ms. COYNER. That is correct.

Mr. PALLONE. That is significant. OK.

The rest of the questions that I had were specific to
concerns that were raised in the aftermath of the Ediso
but obviously have implications in terms of any kind of
or any kind of requirements that we would put in the re
tion.

Again, I want to stress to the committee that the issu
dates as opposed to trying to come up with new way
things that are not necessarily mandated, I am not
the view that we should mandate anything but I do think
things that we need to look into.

Just very quickly, the whole issue of the automatic a
control valves, because it did take so long to turn off t
to speak, in Edison. It was about 3 hours and I forget
manpower.

Mr. TENLEY. Correct.

Mr. PALLONE. What is your position in terms of, if not
then creating more incentives for automatic valves and
trol valves and are there any problems with that?

Mr. TENLEY. In years past I would come up here or in
portunities and say that we don't believe in automatic
cause they can have unintended closure and create bi
lems. Yet when we did our comprehensive inspection in N
following the accident and we will be reporting on that s
found out that one operator has 58 automatic valves in
sey. So for that operator, under that operator's circumsta
matic valves make sense. Other operators don't use them.

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I think the critical thing we have to find out now is what are the operating parameters in which automatic valves can work and encourage operators where appropriate, feasible, to use an automatic valve.

The remote valve presents less of the problem that the automatic valve does in terms of false closure, if you will, and again we are looking at that. The question was earlier about the industry's role here. We have been working very closely with the Interstate National Gas Association of America, INGAA, on their eight-point action plan following the Edison accident and one of the major initiatives under that action plan is to look at the issue of what valves where and how to use them and how to improve them.

We support that and we are working with the industry to look at that question and it is one we have got to solve because I think it is part of the public knowledge base. If it gets out that this valve is a panacea for all problems, we do the public, ourselves and the industry a great disservice. We have got to have accurate information about when and why to use these valves. That is underway.

Mr. PALLONE. The next issue, and it may seem overly simplistic to some, but it was a real problem, in the case of Edison, again, there was a tremendous amount of debris that was piled on top of the pipeline. As you know, there was a gash, if you will, and it was third party damage.

Do you suggest anything in terms of addressing this issue of dumping and the risks posed by dumping in areas where pipelines have been laid? I know my bill seeks to address that. I just wonder if you had a comment on it.

Mr. TENLEY. I certainly would support a provision that got at the question of improper activities on a pipeline right of way. I think the industry would support that as well. I am sure the issue of dumping, we have only seen the tip of the iceberg in Edison, New Jersey. So certainly I think the presence of this in the reauthorization debate through your bill is appropriate. I think it ought to be in there and I think it would help.

Mr. PALLONE. Then the other issue which I know that Congressman Manton was touching upon also is the issue of the placement of new pipelines, particularly in densely populated areas or areas where there already are pipelines and the fact of notice. In other words, the people that were at the Durham Woods complex had no idea they were living in the vicinity of a pipeline. So the issue of notice to residents, notice to communities and what role communities could play, if any, in the siting of new pipelines.

We do have provisions in my bill that would provide for notice even to residents in certain cases and we also have provisions so that I guess it is your office would get involved in making some recommendations about siting. Have you thought about those things?

Mr. TENLEY. This is an area where I think that the need that you described is absolutely essential but also an area where I don't think we need regulation. I think the missing link in the risk equation for too long has been the role of local government and land use planners who allow people to move right on top of the pipeline.

You know as well as I do, because we were on the scene together, if you turn to your right at that asphalt plant, you see the devasta-

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tion of Durham Woods. If you turn to the left, you see new ments being built the same distance away from that right o Buckeye or Texas Eastern did not authorize those apartments there, I didn't authorize those apartments to be there and did not authorize those apartments to be there; local land u ners did and they have to be in the equation.

That gets back to the heart of public knowledge and inform and awareness. I think the industry understands that. I thi dustry is moving very well to make information about thei tems known to local land use planners. But it is absolutely dispensable variable in the risk equation that has not bee dressed well in this country.

Mr. PALLONE. Do you see a role with either OPS or FER example, in helping the communities make those decisions?

Mr. TENLEY. I think there is a role in the sense of leadershi in partnership and I think that the notion in your bill abo idea of consultation, taking the best ideas from the people wl involved, is absolutely the right way to do it. But, again, I seek to avoid yet another regulation and I would prefer to through a partnership approach because there is a lot of m tum behind it already.

Mr. PALLONE. OK. And the last thing I was going to asl George, is again I know you mentioned the smart pigs and th technologies that are being used for inspections. I mean, would you—I mean, would you have us specify such thi smart pigs?

My legislation says, if it is feasible, that smart pigs and spection schedule would be required. Would you see us mov that direction either with smart pigs or other technologies requiring or creating some sort of incentives for those types spections?

Mr. TENLEY. If I could just editorialize for a moment pe more than I have already, I think the issue of pigging is the issue, I think it is the right technical issue and the right issue and the right operating issue and I think the industry to use pigging wherever possible.

I mention trust being essential here to move this pipeli debate along. I would give the industry the opportunity o next 4 or 5 years to demonstrate that based on risk ma principles, going after the biggest risks with the biggest your buck first, they should be able to demonstrate that an think we need Federal mandates, that we should do regulatic the subject.

But I think over the next 4 or 5 years, as risk m t t hold, that the industry and we have an obligation to c e b you and say, we tried it this way and this is to produce and this is the right way to do it. I onstrate that to you, then I think we haven't made the f kind of pipeline authorization bill that I think we ought to

So I would like to stay away from mandates in that are have risk management take hold and provide the incenti dustry to spend their money where the risks are the grea you mentioned, New Jersey, against the national average, cent of the pipelines in New Jersey are in populated ar

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are only in 4 percent of populated areas across the whole system. So if industry is given the discretion and the flexibility with accountability to us that they would be able to assure the public trust, I think that is the way to do it and I wouldn't do it by a mandated regulation. That is a personal opinion.

Mr. PALLONE. I appreciate that and I appreciate your stating that and as we move forward and put together a bill as a committee, or whatever, I guess my view would be that these issues need to be addressed. I am not saying that we have to have any requirements or mandates but, as you know, there are a lot of ways of creating incentives and getting people to do things without saying that they have to be mandated.

Mr. TENLEY. That is right.

Mr. PALLONE. So thanks again.

Thank you, Mr. Chairman.

Mr. SCHAEFER. I thank the gentleman.

One quick question and I know the gentleman from New York has one.

On this issue of pigging, this is an expensive process for the pipelines. How often would you recommend that it should be done or this process should be done?

Mr. TENLEY. I wouldn't put a fixed time frame. I would say as often as the pipeline operator determines in looking at their entire system where their risks are the greatest.

Mr. SCHAEFER. Depends on how old the pipeline segment is?

Mr. TENLEY. It would depend on how old it is, it would depend on its leak history. It could depend on the extent to which it has been encroached. It could depend on the inadequacy of historic records. And pipelines, this is a capital asset that is sold back and forth. Many times, a purchasing operator doesn't have all the information they should have about the pipeline. Perhaps you should do it in that situation to assure yourself from a business standpoint as well as an operational standpoint.

Mr. SCHAEFER. So it basically should be left to the industry itself?

Mr. TENLEY. I believe, under risk principles, there has got to be a good, focused way to know what the risks are to make that decision but, yes, I agree with you.

Mr. SCHAEFER. I thank the gentleman.

I recognize the gentleman from New York.

Mr. MANTON. I thank the chairman.

With regard to the Buckeye Pipeline, which is one that I have a little experience with, I notice they have brightly colored yellow poles and warnings along their right of way. Is that the norm? This seems to work fairly well in a densely populated area where renovations occur, at least there are visual displays that a pipeline is there. Is this form of marking peculiar to the Buckeye Pipeline?

Mr. TENLEY. It is not peculiar. It is the norm. There are a couple of problems with it, however. One is that, in many areas, particularly in rapidly developing areas, real estate agents will take them down in order to make a sale and they don't want people to know there is a risk.

Second, and this is another reason why one-call is absolutely essential, sometimes an excavator will look at a pipeline marker and

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see one 150 yards on the horizon, stand between the two and say, OK, the pipeline is right here. And, in fact, the pipeline is not right there. And they go ahead and dig and they too often hit the pipe, know they have hit something, go home and 3 years later the crack goes to failure. So those two issues are relevant on the issue of pipeline marking.

The third issue would be marking in congested areas because you can't put an orange pipeline marker on the corner of 42nd and whatever crosses it in Manhattan.

Mr. MANTON. We in Queens seem to be the back office, so they probably don't run those pipelines through Manhattan, they come over the low-priced real estate.

Mr. TENLEY. Perhaps.

Mr. MANTON. Thank you, Mr. Chairman.

Mr. SCHAEFER. I thank the gentleman.

I thank both of you for being here today. I just finally would ask Ms. Coyner if, on the question I asked Mr. Tenley regarding the difference in the dollars as far as the "other services" category goes, could you shed any light on that?

Ms. COYNER. I think we are going to have to get it on the record.

Mr. SCHAEFER. The major concern I have is the tremendous increase in the user fee and then all of a sudden we look here and we see "other services" that are increasing by $13 million and no one knows how the money is being spent.

Ms. COYNER. I appreciate your concern, Mr. Chairman, and we owe you an answer. I think that—I am confident that we are going to be able to explain it in a way that shows it is consistent with the other kinds of submissions that we made. I assume that you are looking at the budget detail?

Mr. SCHAEFER. Yes, exactly.

Mr. TENLEY. I just remembered what that is, Mr. Chairman. That is my retirement party.

Mr. SCHAEFER. That will be stricken from the record.

We thank you very much. We wish you the best in the future, Mr. Tenley.

Mr. TENLEY. Thank you, Mr. Chairman.

Mr. SCHAEFER. I hope to see you around here again one of these days.

Mr. TENLEY. I hope we have an opportunity to work together in the future.

Mr. SCHAEFER. Thank you.

The Chair would now recognize the third panel, Mr. Larry Hall, the President and Chief Executive Officer of KN Energy from Lakewood, Colorado. And Commissioner Bruce Ellsworth, New Hampshire Public Utilities Commission of Concord, New Hampshire, and Mr. L.C. Thomas, President of BP Oil Pipeline from Cleveland, Ohio.

Would you gentlemen please come up?

Gentlemen, thank you for being here today on what we feel is a very important issue, reauthorizing the pipeline safety acts. I would like to ask Mr. Thomas, President of the BP Pipeline to open it up and then we will go to Mr. Hall and Mr. Ellsworth.

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STATEMENTS OF L.C. THOMAS ON BEHALF OF THE ASSOCIATION OF OIL PIPE LINES, AND THE AMERICAN PETROLEUM INSTITUTE; LARRY D. HALL ON BEHALF OF INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA AND THE AMERICAN GAS ASSOCIATION; BRUCE B. ELLSWORTH ON BEHALF OF THE NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS AND THE NATIONAL ASSOCIATION OF PIPELINE SAFETY REPRESENTATIVES

Mr. THOMAS. Thank you, Mr. Chairman. My name is Larry Thomas. I am President of BP Oil Pipeline Company but I am here today on behalf of API and AOPL of which I am the past chairman.

Briefly, AOPL is an unincorporated trade association of 78 common carrier oil pipeline companies and API represents over 300 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these two organizations represent virtually all of the U.S. pipeline transporters of petroleum and petroleum products.

As the chairman said, we have an excellent safety record. Pipeline transportation of petroleum and petroleum products is an essential component of our Nation's economic system. We have a network of over 200,000 miles of liquid pipelines. Our industry transports over 50 percent of all the petroleum moved in the United States. This is an extremely valuable private investment in our Nation's infrastructure and has an excellent safety record.

My remarks today are directed to the oil pipeline safety program that is presently administered by the Department of Transportation and changes which may be made to complement that program. When the subcommittee addresses the administration's reauthorization request together with any proposed amendments to the Pipeline Safety Act, we in the industry would appreciate the opportunity to offer our comments on that bill.

We hope that the subcommittee will give close scrutiny to each of the specific funding requests. As noted, the industry does have concerns on funding levels. I will also address the industry concerns with respect to revisions of H.R. 432 by submitting with this testimony the testimony the industry presented to this subcommittee on June 23 of last year.

Very briefly, I would like to summarize my written statement with these points. The industry supports an effective safety program administered by the Office of Pipeline Safety. The industry supports continuation of the current regulatory program employed by OPS together with OPS and public sector representatives. The industry has been exploring the feasibility of risk assessment and risk management concepts and their application to regulatory programs. The industry funds the OPS program through user fees and is naturally concerned that the program be cost efficient. Finally, that the industry believes that risk assessment and cost/benefit analysis should be employed before the promulgation of regulations.

Though the program as presently administered has been effective, we will propose two major improvements to the act and recommend limited technical corrections in several other areas. Improvements we are seeking: First, the requirement that the Sec-

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retary conduct risk assessment, cost/benefit analysis during t
velopment of regulations and, second, inclusion of statuto
guage allowing the Office of Pipeline Safety to establish
untary project to demonstrate effectiveness of risk m
programs as an alternative means of regulatory compliance
a means of moving toward the goal of continuous improvem
pipeline safety rather than just regulatory compliance.

That concludes my oral testimony, Mr. Chairman. Again
sure you that the industry will work with you in this en
improve pipeline safety. Thank you very much.

[The prepared statement of Larry Thomas follows:]

PREPARED STATEMENT OF THE ASSOCIATION OF OIL PIPE LINES AND THE AM
PETROLEUM INSTITUTE

My name is Larry Thomas and I am the President of BP Oil Pipeline C
and past Chairman of the Association of Oil Pipe Lines. I am here today o
of the American Petroleum Institute (API) and the Association of Oil Pi
(AOPL).

AOPL is an unincorporated trade association of 78 common carrier oil
companies. API represents over 300 companies involved in all aspects of th
natural gas industry, including exploration, production, transportation, refi
marketing. Together, these two organizations represent virtually all of
pipeline transporters of petroleum and petroleum products.

Pipeline transportation of petroleum and petroleum products is an essen
ponent of our Nation's economic system. With a network of more than 200,0
of liquid pipelines, our industry transports over 50 percent of all petroleu
in the United States. To put this in perspective, pipelines move 66 perce
total ton-miles; tankers move 40 percent; trucks 3 percent and rail 1 perc
pipeline system has a total capacity of approximately 3.6 trillion barrel mil
average of 9.8 billion barrel miles por day.

This valuable private investment in our Nation's infrastructure has an
safety record. There are many real incentives for the pipeline industry to
safely. These incentives include our responsibility to the public to preven
life, injury, and environmental or property damage; we have our own si
capital investment to protect; we have shareholders to whom we are respo
the value of their investment; and we must provide reliable transportatio
with as little interruption as is operationally feasible.

My remarks today are directed to the oil pipeline safety program as it is
administered by the Department of Transportation, and changes which
made to complement that program. When the subcommittee has before it th
istration's reauthorization request, together with any proposed amendmen
Pipeline Safety Act, we would appreciate the opportunity to offer our comm
that bill. We hope that the subcommittee will give close scrutiny to each
funding request. I will also address industry concerns with respect to prov
H.R. 432 (which is substantially identical to H.R. 4616 introduced in the l
gress) by submitting with this testimony the testimony the industry pres
this subcommittee on June 23, 1994.

The following five observations summarize my statement.

—The industry supports an effective safety program administered by th
of Pipeline Safety (OPS).

—The industry supports continuation of the current regulatory program e
by OPS.

—Together with OPS and public sector representatives, the industry has
ploring the feasibility of risk assessment and risk management concepts a
application to regulatory programs.

—The industry funds the OPS program through user-fees and is natu
cerned that the program be cost-efficient.

—The industry believes that risk assessment and cost/benefit analyses s
employed before the promulgation of regulations.

While the program as presently administered has been effective, we are
provide you with our vision of how we can better work jointly to address
lenges and continue to improve the safety record of the liquid pipeline indu
will propose two major improvements to the act and recommend limited
corrections in several other areas. We have been working with the natu

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dustry to consolidate our efforts, but our testimony today reflects the policy positions of the liquid petroleum pipeline industry.

The improvements we are seeking are, first, statutory language allowing the Office of Pipeline Safety to establish a voluntary program to demonstrate the effectiveness of risk management programs as an alternative means of regulatory compliance and as a means of moving toward the goal of continuous improvement in pipeline safety rather than just regulatory compliance; and second, a requirement that the Secretary conduct risk assessment cost/benefit analyses during the development of regulations.

Let me describe our proposal on risk management and outline to you the context under which this proposal has been developed. In early 1994, the American Petroleum Institute and the Office of Pipeline Safety undertook a joint initiative to explore the potential applicability and benefits of formalized risk management programs within the liquid pipeline industry from a government and a pipeline operator perspective. The Risk Assessment Quality Team, comprised of pipeline operators, employees of the Office of Pipeline Safety and two public sector participants, was charged with four objectives:

1. Investigate the state-of-the-art of risk assessment/risk management methods and the state-of-the-practice of risk assessment/risk management within the pipeline industry.
2. Define suitable methodologies for risk assessment and risk management for use by pipeline operators.
3. Define concepts of incorporating within government regulations and practices the use of risk assessment and risk management by industry.
4. Define the strategies for achieving the use of risk assessment/risk management by pipeline operators and regulators by means that assure all the shareholders of the continuing focus on safe operations.

The quality team is scheduled to make its final report to the sponsoring organizations in early April.

We believe that both OPS and industry are at a significant crossroad. That junction is defined by the continuing growth of "single-solution-oriented" prescriptive rules promulgated either directly by legislation or through regulations. The technical issues that remain are exceedingly complex and no single solution can be expected to be applied both effectively and efficiently. It is time to stop mandating one-size-fits-all solutions to a sophisticated industry that is capable of evaluating risks and applying specific solutions to specific problems. The report of the quality team envisions a future state in which both the Office of Pipeline Safety and the pipeline industry can demonstrate that risks to the public and to the environment are being effectively managed, a future in which pipeline operators can seek case-specific solutions to identified risks, and in which OPS can measure the overall effectiveness of an operator's solutions.

But how do we get to this new paradigm? We believe that OPS and industry need to be given the opportunity to demonstrate that operator's risk management programs can be used by both operators and regulators to continue to improve industry performance and its safety record. What is contemplated is a demonstration project whereby the Secretary *may* permit owners and operators of natural gas or hazardous liquid pipelines to develop risk management plans and conduct certain design, maintenance, inspection and other activities in conformance with risk management plans reviewed and approvod by the Secretary.

Participation in the project will be voluntary. The Secretary will decide which owners or operators who have volunteered, and which facilities, will be allowed to participate. The Secretary will have authority to inspect and to require appropriate documentation as he designates. During the duration of the project the participants will not be required to implement new regulations promulgated by the Secretary after the commencement of the demonstration project as to facilities covered by the project.

At the conclusion of the project, not to exceed 4 years, the Secretary will report to the Congress on its results and recommend, as necessary, additional legislation.

Finally, I would like to emphasize that such a project would demonstrate a number of things, but one of the primary demonstrations will be that the regulators and the regulated industry share the same goal—improving industry safety performance—and both the regulators and the industry participants will be learning what is required to establish new performance measures, manage operations to improve those performances measures, and apply the necessary resources to achieve the objective of continuously improving the performance of the system.

We will also propose that when prescribing significant new standards or regulations that the Secretary shall prepare a risk assessment document and conduct a cost/benefit analysis. Public and private resources available to address safety and

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environmental concerns are not unlimited; those resources need to be allocated to address the greatest needs in the most cost-effective manner so that the incremental costs of regulatory alternatives are reasonably related to the incremental benefits. Our proposal is consistent with legislation the Congress is now considering which would have broader ramifications, but our proposal is designed to specifically accommodate the circumstances that are unique to the pipeline industry.

Mr. Chairman, this concludes my testimony. It is a pleasure to appear before your subcommittee to discuss the important subject of pipeline safety. I assure you of our commitment to work closely with you and your staff as the legislative process moves forward. I would be pleased to answer any questions you or your colleagues may have.

PREPARED STATEMENT OF THE ASSOCIATION OF OIL PIPE LINES AND THE AMERICAN PETROLEUM INSTITUTE (JUNE 23, 1994)

My name is Bob McMahan and I am the President of Shell Pipe Line Corporation, and Chairman of the General Committee on Pipelines of the American Petroleum Institute (API).

I am here today on behalf of API and the Association of Oil Pipe Lines (AOPL). Accompanying me is Patrick Corcoran, Executive Director of AOPL.

AOPL is an unincorporated trade association of 78 common carrier oil pipeline companies. API represents over 300 companies involved in all aspects of the oil and natural gas industry, including exploration, production, transportation, refining and marketing. Together, these organizations represent virtually all of the U.S. pipeline transporters of petroleum and petroleum products and a significant majority of the gatherers via pipeline of crude oil and natural gas.

Liquid petroleum pipelines are the safest mode of transportation in the United States. There are more than 220,000 miles of petroleum pipelines, which together transport almost one-fourth of all intercity freight in the United States.

Our safety record is the result of a number of factors, the most important of which is the pipeline industry's responsible approach to the design, construction, operation and maintenance of its facilities. Federal safety regulations require consistent safety practices among the pipeline companies and from State to State. Also, the industry has worked diligently to advance pipeline technology and operating practices that affect safety. The last 40 years have seen great improvements in corrosion control, quality of pipe and equipment used in pipelines, integrity testing methods, and in computer instrumentation for pressure control and pipeline monitoring, including leak detection.

There are many very real incentives for this industry to operate safely. These include responsibility to the public for potential loss of life, injury, property and environmental damage; significant capital investment; and the need to attract investor, employee and general public good will. Add to this one obvious fact—a disabled pipeline does not transport oil or refined products.

A major cause of pipeline accidents has been third-party—excavator—damage, an activity over which the operator has limited control. In order to minimize such third-party accidents, present DOT regulations provide for routing proposed pipelines around congested residential and industrial areas, wherever possible. However, many pipelines were constructed years ago in rural areas, which have since become populated. Despite regular aerial and, in some cases, surface inspection of pipeline rights-of-way, above ground signs marking pipeline routes, active public education programs regarding the hazards of digging around pipelines, and existing one-call systems; third-party damage continues to be a major problem.

One-Call Systems

One-call systems have become a proven method of alerting the excavator to the existence and location of underground facilities and have been used effectively. It is, and has been, our position that one-call systems should be encouraged and supported. Broad participation by pipeline companies, underground utilities, public works, highway departments, and excavators alike should be mandatory.

The Comprehensive One-Call Notification Act of 1994, H.R. 4394

Today, the subcommittee has before it for consideration the Comprehensive One-Call Notification Act of 1994 (H.R. 4394).

We understand that the chairman will shortly be offering an amendment to that bill. Our comments are directed to that amendment. Let me first say that the industry strongly supports one-call concepts and systems.

I will now respond to the questions the subcommittee has asked:

We support broad-based participation in one-call systems by both owners of underground facilities, including hazardous liquid pipelines regulated by the Depart-

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ment of Transportation (DOT), and excavators. We are especially pleased that under this legislation government entities and public utilities, as well as private underground facilities owners, are required to participate in one-call systems.

As to the benefits of a nationwide toll-free telephone number, we understand that what is envisioned is a single number in use nationwide that would access the local one-call system—much as dialing 411 accesses the local directory assistance. We strongly support such a single number to facilitate communication and public education, including public service announcements and notification along the right-of-way, thereby improving the use and effectiveness of one-call systems.

As previously stated, the industry has existing programs to promote public awareness. We support an aggressive education program to further the use of one-call systems. Initiation of a government sponsored public education program is also a positive approach.

With respect to the proposed penalties and enforcement, legislative language should consider the balance between encouraging participation and focusing enforcement on repeat offenders. We do not want to make the penalties so large that they impede the bill's goal of improving communication between excavators and facility operators.

Presently some form of one-call notification system exists in 48 States. Some of these systems are mandatory while others are voluntary in nature. Most one-call systems are formed as nonprofit corporations controlled and managed by a board of directors consisting mainly of representatives of underground facility owners. These systems are effective and cost efficient, and, as envisioned in the bill, should continue to operate. We strongly support the ability of States to petition the Secretary of Transportation for a waiver with respect to one-call systems that meet the minimum requirements of this legislation.

State agencies should not operate one-call systems. They should only be responsible for providing guidelines, oversight and enforcement.

With respect to State grants, we understand the funds contemplated for grants to States to establish one-call systems are currently in escrow. Further appropriation of funds should not occur until the next session of Congress when the Pipeline Safety Act Reauthorization is again considered.

Additional Legislation

We understand that Congressman Pallone is contemplating introducing additional legislation. A draft version which we have been provided dated June 15, 1994 includes provisions at the request of Senator Lautenberg. Among the matters addressed are recovery of costs by DOT for its incident investigations, development of an electronic data base, use of internal inspection devices, public awareness, and substantial further increases in funding for the Office of Pipeline Safety.

Because of the timing we have not had an opportunity to thoroughly review these proposals. We will make additional observations when we testify, and we request an opportunity to provide further written comments for the record.

Our initial general appraisal is that many of these provisions appear to be both unnecessary and onerous, and punitive in some cases for responsible operators.

Reimbursement of DOT Costs

A particularly troublesome concept is one that requires a company, regardless of who is at fault, to reimburse the Department of Transportation for costs DOT incurs with respect to an incident at one of the company's facilities. Funds are already provided through user fees paid by the pipeline companies to underwrite the Office of Pipeline Safety programs.

Moreover, this bill and other pending legislation, appear to be overwhelming OPS with funding without a coordinated and comprehensive concept of what would be a manageable and effective safety program.

The other legislation before the subcommittee today recognizes that many incidents are caused by the negligence of third parties. Yet, this element of the draft bill would punish companies acting in a responsible manner for incidents caused by others.

Internal Inspection Devices

The Pipeline Safety Act of 1992 provided for periodic inspections of liquid pipelines in environmentally sensitive and high density population areas by amending the Hazardous Liquid Pipeline Safety Act (HLPSA) of 1979. We understand that a further amendment is to be proposed to section 203(k)(2) which would provide that the Secretary establish a schedule for such inspections when the Secretary has issued regulations prescribing the use of an instrumented internal inspection device. It is our opinion that the Secretary already has such authority under section 203(k)(2).

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In fact, in accordance with the 1992 amendments, the Department tation is required to promulgate definitions of "environmentally sensitiv density population areas" which will then be followed by regulations re propriate inspection of pipelines in these areas.

This bill adds a further amendment to the HLPSA which would requir by an instrumented internal inspection device of all new and replaceme prior to being put in service.

DOT already has the authority to require the periodic inspection of instrumented internal inspection devices or any other equally effectiv method, as stated above. Further, new pipelines are required to undergo testing before being placed in service.

This provision would dictate to DOT how it is to admi its i grams, eliminate or curtail other proven methods such as hydr be extremely expensive without any technical evaluation of the l

Public Awareness

Establishing a high level of community awareness regarding pipelin always been a priority for the pipeline industry. Current liquid pipeline require individual companies to have public education programs. API h years taken an active role in sponsoring various programs to help pipel meet community awareness objectives. These efforts include brochures, radio and television public service announcements, and meetings with r cavators and government agencies. The industry supports more activitie ture which will be constructive, such as the concept of encouraging in report excavation on or near pipeline facilities.

We understand that legislation is being contemplated which would re tors annually to contact local residents within a specific distance of a agree that would be appropriate for the Secretary of Transportation t the distance within which such notification would be required. However some arbitrary distance, such as a half mile (1,000 yards) would be dif impossible, to implement across the Nation. Further, it is not based or or realistic risk assessment. Finally, we are concerned with any mand quires the industry annually to contact every individual within the c area, particularly when the area is a mile wide.

Electronic Data on Pipeline Facilities

This provision permits DOT to develop an electronic data base of inf the nature, extent and geographic location of pipeline facilities. Amon poses, the data base would be intended to assist States with land use p vironmental and pipeline regulatory oversight, as well as risk assessmen planning with respect to such facilities.

We first note that it is OPS that has the primary responsibility for pi and environment regulation, not State agencies. Further, we question th tion of land use planning on a national basis because of the complexity changing nature of this information. Again, most land use planning is p the local, township or county level, not by State agencies.

Such electronic data bases are extremely expensive to develop and re uous updating for accuracy. Any company, State or other entity that a variety of purposes—from such a program should be required to eq the costs, rather than imposing yet another financial burden solely on operators or owners.

One-Call

Prevision is made in this bill for grants to States for development an ment of one-call systems *only* if the State ensures that costs are shar by owners or operators of underground facilities.

We suggest that any relevant provisions relating to one-call shoul porated in H.R. 4394 by the amendment to be offered in the nature of We believe that the costs of these systems should be borne equitably, *b* mined by the participants.

Additional Funding

The industry does not object to additional funding of the Office of P program where a clear need is demonstrated, but, as stated, further ap should only be considered in the next session of Congress when their amount can be scrutinized.

Mr. Chairman, this concludes my testimony. It is a pleasure to appear subcommittee to discuss the important subject of pipeline safety. I assur commitment to work closely with you and your staff as the legislative pr

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forward. I would be pleased to answer any questions you or your colleagues may have.

Mr. SCHAEFER. Thank you, Mr. Thomas. We will now hear from Mr. Hall.

STATEMENT OF LARRY D. HALL

Mr. HALL. Thank you, Mr. Chairman.

My name is Larry Hall. I am President and Chief Executive Officer of KN Energy. We are a natural gas pipeline, gatherer, processor and also a local distribution company that operates out of Lakewood, Colorado.

I am here today to testify on behalf of the Interstate Natural Gas Association and the American Gas Association.

I want to thank this committee for holding this oversight hearing in order to review the status of pipeline safety laws and seek input from the industry as to ways that the Pipeline Safety Act can be implemented. Pipeline safety is a top priority to the members of INGAA and AGA. It is in our own interests to assure that our customers, our employees and all public citizens that we have a safe system. Our commitment to safety has translated into a track record that shows that natural gas pipelines are the safest method of delivering the energy our Nation needs.

Year after year, the statistics released by the National Transportation Safety Board on transportation-related fatalities demonstrates this fact. However, we recognize that we must continually seek ways to make our systems even safer. Last year as a result of the natural gas accident in Edison, New Jersey, the INGAA board set up a board task force to review our safety procedures to see if we could improve them. I am a member of this task force and I would like to talk a little bit about what the INGAA board safety task force is doing.

We developed an action plan with seven aggressive initiatives. The first initiative is to seek passage of legislation to encourage States to improve their one-call, some may call it call-before-you-dig, programs. Third party damages causes 60 percent of the natural gas accidents that occur.

We are grateful for the work Congressman Pallone and the subcommittee did to move one-call legislation this last year. INGAA and AGA committed to work with this subcommittee to pass one-call legislation that would help realize the goal of comprehensive protection in every State.

Second, we are developing a risk management approach to pipeline safety and we have a couple of objectives there to look at. Third, we are looking at the benefits and limitations of internal inspection devices such as smart pigs and automatically and remotely operated shutoff valves. And, fourth, to identify research opportunities to improve those technologies. Assisting us in those efforts is the Gas Research Institute.

Fifth, we are reviewing our petroleum monitoring procedures through benchmarking and determining whether improvements are needed. Sixth, in the area of public education and emergency preparedness, we have identified priority projects and we have begun to develop better pipeline safety information materials.

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Seventh, we have reviewed the current pipeline safety-rela search programs of the Gas Research Institute Pipeline Re Committee and have developed a coordinated research pı which assigns priorities and develops products and proc which provide safer and more reliable products to the public.

I would like to now discuss the Pipeline Safety Act and tl assessment risk management approach that we are proposi believe that our commitment to safety combined with our efi continue improving the safety through the aggressive initia have just discussed, including one-call, will meet the public's Our industry believes duplicative or additional burdensome g mental regulations are not cost effective.

Pipeline operator resources are not unlimited. Cost of com with Federal regulations are ultimately borne by the natu consumer in an increasingly competitive marketplace. Any F regulations must be cost effective and only imposed when th ists an industrywide problem with the current safety progran

Where this Congress in its wisdom believes Federal action essary, such legislative initiatives should focus on only thos of activities that potentially pose the greatest risk to the pu the pipeline's integrity. We urge Congress to introduce a risk assessment prioritization program before new initiativ implemented. The Office of Pipeline Safety should focus or areas where a demonstrable widespread risk exists and prom flexible performance-based regulatory responses. Any Fede quirements should be justified by a meaningful cost/benefit sis.

These risk assessments and cost/benefit analyses should l ject to review by a group with balanced government, public a dustry representatives who understand pipeline safety issue intention is not to throw up barriers to reasonable and ne eral pipeline safety regulations. Our purpose is to ensure u system focuses on areas of real need and to streamline t latory process. In this regard, we encourage Congress to pr mechanism to allow the Office of Pipeline Safety to disc or concerns with the industry and other interested part p entering into a formal rulemaking process.

The industry agrees with the Office of Pipeline Safety, th is the time to expand the use of risk management practices the gas industry to increase the level of safety to the publ pipeline industry is embracing the concept of risk mar a tool to further the concept of public safety beyond the p prescriptive regulations.

Risk management has been a part of the gas pipeline in since the inception of industry standards in the early 1950 risk management language our industry is proposing perm industry and the Office of Pipeline Safety to assess the abilities and consequences of an accident on each individua line to a finer level of detail, assuming relative risk and per limited resources to be applied more efficiently.

The fundamental premise of this risk management prop acceptance of risk management practices only when it will in an equal or greater level of safety compared to present mi standards.

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This concept does require cooperation and partnering. The stakeholders are composed of industry, the Congress, government regulators and the public. We propose that Congress establish a demonstration program to permit a pilot implementation of this process.

Finally, I would like to discuss the transmission user fees. As a result of the Edison accident and a product pipeline accident in Virginia, the Office of Pipeline Safety sought an additional $16.2 million above the level authorized by your committee for fiscal year 1995. The conference agreed to appropriate a fiscal year 1995 budget of $37,618,000, which is an $18 million-plus increase over the authorized fiscal year 1994 budget of $19 million.

In 1986, the user fee for gas transmission lines was about $24 per mile and it almost doubled by 1994 to almost $45 per mile. In 1995, it will more than double to $97 per mile and now for fiscal year 1996, if the DOT request is approved, the user feel will go to $110 per mile.

The industry wants assurance that this money is being well spent. However, INGAA and AGA have to object to some of the programs that have been created in fiscal year 1995 as being duplicative and redundant with what either the industry or some other agency is already doing.

Money sent to the Office of Pipeline Safety is money that pipelines could spend on their own safety programs. We request that Congress reject the Office of Pipeline Safety request to increase its appropriation for fiscal year 1996 by another $4 million and that the authorizing committees will place a reduced ceiling on future spending levels. We also encourage Congress to investigate the planned use of the fiscal year 1995 increase for duplication and redundancies. We want an efficient and a cost-effective Office of Pipeline Safety but we do not want user fee money spent for redundant and unnecessary programs. We support the Office of Pipeline Safety vision of partnership and we would like to work with the Office of Pipeline Safety to explore ways to share information and assist them to do their job better and to form a true and cost-effective partnership.

In summary, a prime goal of the natural gas pipeline industry is to have the safest delivery system possible. A major step in that direction is the action the Congress can take by passing the one-call legislation. This is absolutely the most effective action government can take.

We recommend improvements in the Federal regulatory process and a performance-based approach to regulations and we support a demonstration program in the Office of Pipeline Safety that moves away from proscriptive Federal regulations to a risk management approach.

I thank this committee and the chairman and we look forward to working with you in the future.

[The prepared statement of Larry D. Hall follows:]

PREPARED STATEMENT OF LARRY D. HALL ON BEHALF OF THE INTERSTATE NATURAL GAS ASSOCIATION OF AMERICA AND THE AMERICAN GAS ASSOCIATION

Mr. Chairman, members of the committee, I am Larry Hall, President & Chief Executive Officer of KN Energy headquartered in Lakewood, Colorado. I am here

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today to testify on behalf of the Interstate Natural Gas Association (INGAA) and the American Gas Association (AGA) on the issue of pipeline safety.

INGAA is a non-profit national trade association representing the interstate natural gas transmission companies operating in the United States and the interprovincial pipelines in Canada, as well as natural gas companies in Mexico and Europe. AGA is a national trade association comprising approximately 290 natural gas distribution and transmission companies throughout the United States, Canada and Mexico. Together our member companies transport and deliver 90 percent of the Nation's natural gas from the wellhead to the burnertip through the Nation's 280,000 miles of interstate transmission pipelines and 1.5 million miles of distribution pipelines. Our members serve over 56 million customers in the United States.

I want to thank this subcommittee for holding this oversight hearing to review the status of pipeline safety and receive suggestions for improvements to the Pipeline Safety Act.

Pipeline Safety Record

I want to assure you that pipeline safety is a top priority of all members of INGAA and AGA. It is in our own best interests to assure our customers, our employees, our shareholders and all public citizens that we operate a safe pipeline system. Natural gas pipelines are the safest method of delivering the energy our Nation needs. Year after year the statistics released by the National Transportation Safety Board (NTSB) on transportation-related fatalities demonstrate this fact. (See attachment A).

However, INGAA and AGA members continue to seek ways to assure that our systems become even safer. Last year, as a result of the natural gas accident in Edison, New Jersey, the INGAA Board set up a Board Task Force to review our safety procedures to see if we can improve them. I am a member of this task force.

INGAA Board Safety Task Force

This INGAA task force developed an aggressive action plan with seven high priority initiatives:

(1) The first is to seek passage of legislation to encourage States to improve their one-call (call before you dig) programs. Third party damage causes 60 percent of the natural gas accidents that occur. The House passed legislation to establish a model one-call program and encourage States to improve their systems twice last year (H.R. 4394 and H.R. 5248), but it failed to be approved by the Senate. We are grateful for the work Congressman Pallone and this subcommittee did to move one-call legislation last year. INGAA and AGA would like to work with this subcommittee in this Congress to pass a one-call bill that would help us realize the goal of comprehensive protection in every State.

(2) We are working to develop a risk management approach to pipeline safety. I will discuss this concept in greater detail later in my testimony.

We are working with the Gas Research Institute to determine the benefits and limitations (3) of internal inspection devices, such as smart pigs; and (4) automatic and remotely operated shutoff valves. We are reviewing the state-of-the-art of these technologies and identifying new or enhanced technologies that may more effectively detect pipeline cracks and corrosion or control product loss without causing unwanted customer supply curtailments.

(5) We are reviewing our patrolling and monitoring procedures and through benchmarking, determining whether improvements are needed. If so, we intend to petition RSPA for appropriate rule changes.

(6) With respect for the need to improve public education and emergency preparedness, we are reviewing industry practices. We have identified some priority projects and work has begun to develop better pipeline safety information materials.

(7) Finally, we have reviewed the current pipeline safety-related research programs of the Gas Research Institute and the Pipeline Research Committee and have developed a coordinated research program which assigns priorities and develops products and procedures to assist our continuing effort to provide safer and more reliable service to the public.

We have and are continuing to discuss these initiatives with Secretary Peña and the Department of Transportation and are pleased to share this information with you.

The Burden of Mandated Rulemakings

It is frustrating to many operators that additional Federal requirements are often imposed on the pipeline operators themselves when the vast majority of pipeline accidents have been caused by someone else, a "third party", digging into their line. This was the case with both the Edison, New Jersey natural gas and the Northern Virginia liquid line incidents. In both cases, investigation of the accidents determined that the cause was third party damage and yet most of the subsequent legis-

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lative proposals for additional Federal regulations have failed to address third party damage. In fact, many of these proposals would seek to impose additional and sometimes very costly requirements on the pipeline operator.

This pattern has been repeated during past reauthorizations of the Federal pipeline safety regulatory program. In general, between one reauthorization and the next, one or two fairly significant accidents would occur. Historically these types of events have been rare. However, Congress has generally responded by mandating that the Department of Transportation's Office of Pipeline Safety (OPS) conduct a rulemaking that focuses on requiring the use of a specific tool, procedure or process. I do not mean to minimize industry's concern whenever there is a significant accident. Our operations managers study the investigation reports thoroughly to identify ways to continue to improve on our safety procedures. Our goal is to avoid accidents but parochial political reactions searching for panacea are not the best way to reach this goal.

Although well-intentioned, the practice of statutorily imposing prescriptive mandated rulemakings has greatly burdened the regulatory process and operators ability to administer its pipeline safety programs. Some of these rulemakings have resulted in proposed Federal requirements that micro-manage with "one-size-fits-all" requirements for all pipelines, regardless of whether other pipelines are experiencing similar circumstances that were relevant in a previous accident. Furthermore, this approach fails to recognize that each pipeline system is unique and that the operators have finite resources available each year to run their safety programs. The limited resources of all operators are being directed by Federal regulation to activities that do not necessarily increase safety overall. Below are three examples that we feel illustrate this point:

Smart Pig Retrofit

The Department of Transportation has issued a Final Rule that would require transmission pipeline operators to modify large segments of their pipelines to accommodate "smart pigs" when doing routine repair and replacement maintenance activities for small increments of line. This was in response to an amendment to the 1992 Pipeline Safety Act. As promulgated, Congressional wording indicated the rule should be practicable. Industry objects to the Rule as being overly costly and having little safety benefit.

Estimated costs of compliance is $700 million annually with a total cost estimated at $2.6 billion. There is no evidence that would indicate that this proposed regulation would significantly improve safety. Furthermore, according to DOT incident reports, from 1984 to 1991, the total number of accidents due to corrosion of natural gas pipelines was 154 accidents that resulted in 1 fatality, 6 injuries and $14,600,000 in property loss.

Excess Flow Valve (EFV) Installation Rule

In 1992 Congress directed the Secretary of Transportation to determine the circumstances and regulations for the installation of excess flow valves. The Department of Transportation's cost benefit analysis of this Proposed Rule is seriously flawed. The statutory directive for this rule gives DOT discretion as to whether or not to mandate installation of the valves. The industry contends that a valid cost/benefit study would not support a mandatory installation requirement.

Estimated cost of compliance would be between $35 to $50 million per year with a total cost of over $1 billion. DOT incident reports from 1984 to 1991 identify 179 accidents caused by outside force damage on service lines where excess flow valves can be installed. These resulted in 2 fatalities and 11 injuries annually. The natural gas industry serves over 56 million customers and therefore the annual risks of death that EFV's address are less than 1 in 25 million services (e.g. households).

Operator Training and Qualification Rule

Also in 1992 an amendment was added to the Pipeline Safety Act by Congress to require testing of the qualifications of persons operating and maintaining pipelines. As a result, the Department of Transportation has proposed an extremely prescriptive "training regulation." The statute calls for certification by the operators as to the qualification of their personnel. The industry contends that DOT has overstepped its statutory authority by requiring detailed, overly burdensome training programs for all pipeline operators.

Estimated cost of compliance with the proposed rule would be, at a minimum, between $200 to $300 million. No solid data exist that shows that current training programs for pipeline employees are inadequate or have caused accidents. To the contrary, the excellent safety record of the natural gas pipeline industry indicates that our members' employees are well qualified to ensure the safety of their pipeline systems and the public.

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It is the belief of the natural gas industry that a more flexible and r approach is needed. We urge you, the members of the subcommittee, to r and rethink the Federal role and approach to pipeline safety. We submit most effective way of ensuring the public safety is for the Federal Gove focus on setting safety policies and objectives while leaving the operator th ity to select the tools (i.e., smart pigs, hydrostatic testing, shut-off valv meet these goals. Pipeline operators have the most to lose if the public pipelines are unsafe. Pipeline operators are on the front line of safety an the hands-on activities necessary to implement a company's safety progra sure compliance with Federal safety standards. Pipeline operators em trained professionals to accomplish this task and are ultimately held ac

By focusing on policy and performance styled requirements Congress w up the finite resources of both the Office of Pipeline Safety and operators maintain their systems. We believe that this type of flexible Federal pipel program would lead to greater protection of the public.

Better Rulemaking Process (Cost Benefit/Risk Assessment)

The current process for developing and promulgating pipeline safety ru improved in several ways. One way is to provide OPS with better infor which to base its regulations. We encourage Congress to provide a mec allow OPS to discuss ideas or concerns with industry in an open fashio entering into a formal rulemaking process. More open communication w a greater understanding of the issues and a greater appreciation of the p all parties.

We urge OPS to hire personnel with experience in pipeline safety progr lated professional or academic training. We support the idea of developi provide OPS personnel with the knowledge and training they need to a to use their judgment when assessing a company's pipeline safety program

The industry wants Congress to know that pipeline operator resources a limited. Eventually, costs of compliance for Federal regulations are ultima by the natural gas consumer in an increasingly competitive market. An regulations should be as cost-effective as possible and only be imposed w clearly exists a widespread problem with the current safety program. F tions should focus on those areas or activities that potentially pose the gr to the public or a pipeline's integrity.

We suggest that a formal risk assessment prioritization program be a DOT should be allowed to focus on those areas where a demonstrable, w risk exists and to promulgate flexible performance-based regulatory respo thermore, any Federal requirement should be justified by meaningful c analysis. These risk assessments and cost/benefit analysis should be r view by a group with balanced government, public and industry represen understand pipeline safety issues.

Our intention is not to throw up obstacles to reasonable and needed Fe line safety regulations. Rather, our purpose is to find ways to ensure tha tem focuses on areas of real need and to streamline the regulatory proce that seek to avoid major conflict over regulatory proposals.

Risk Management

The pipeline industry is embracing the concept of risk management a further the goal of public safety beyond the present prescriptive regulatio framework, risk is a function of the probability of an event occurring and ing consequences. "Risk management" is defined as the systematic app management policies, procedures, finite resources, and practices to the tas lyzing, assessing and controlling risk in order to protect employees, the ge lic, the environment, and the pipeline.

Risk management has been a part of the gas pipeline industry since the of industry standards in the early 1950's, although it may have been calle names. Many of the industry standards are based on a risk management The industry standards based on risk management techniques were codif Office of Pipeline Safety with the adoption of Part 192 Minimum Pipel Standards in 1969. Only lately, has the specific term "risk management fined as this management philosophy in the natural gas industry.

Traditional regulatory practice is to group and average probabili s sequences and prescribe general regulations for specific problems. The ment language we will propose permits the industry and OPS to abilities and consequences of an accident on each individual to a fine assuming relative risk, permitting limited resources to be applied more Using the same philosophy that Congress has used by allowing flexibil States through the use of block grants, this risk management process

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operator to determine the allocation of industry resources to efforts that will best benefit the public. In those instances, where consequences are deemed higher for a specific system, individual pipelines then have the flexibility to reallocate additional resources from areas of lower consequence to meet their needs.

The fundamental premise of any new risk management proposal should be the adoption of risk management practices only when they result in an equal or greater level of safety compared to the present minimum standards.

This concept requires the cooperation and partnering of the stakeholders composed of industry, Congress, government regulators, and the public. As with any new implementation, there is a learning period in which the stakeholders identify concerns and solutions. Each of the stakeholder groups must move through a formalized acclimation process until the process is integrated into the normal day-to-day business. Realizing this need, we will propose a demonstration review to permit a pilot project for implementation of the risk management alternative.

The industry in concert with the Office of Pipeline Safety (OPS) proposes that now is the time to expand the use of risk management practices within the gas industry to increase the level of safety to the public.

Pipeline User Fees

I would now like to discuss the authorization level for the Office of Pipeline Safety in RSPA. As a result of the Edison accident and a product pipeline accident in Virginia, the Office of Pipeline Safety sought an additional $16.2 million above the level authorized by your committee for FY 95. The conference agreed to a FY 95 budget of $37,618,000, which is a $18.048 million increase over the authorized FY 94 budget of $19,381,000.

While INGAA supported an increase for the Office of Pipeline Safety, both INGAA and AGA wanted to assure that any increase was spent on meaningful programs. We never supported a near doubling of the authorized amounts.

The user fee program came about as a result of the Omnibus Budget Reconciliation Act (section 7005, Pub.L. 99-272) of 1985. The costs of this user fee are imposed upon the consumers of gas. OPS is the only office in the Department of Transportation which is funded 100 percent by user fees. In 1986, this user fee for gas transmission lines was $23.99 per mile. It almost doubled by 1994 to $44.94. In one year, 1995, it will more than double again to $97.00 per mile for natural gas transmission lines. The administration's proposed increase for FY 96 of $4.1 million will bring this fee to $110.00 per mile. (See attachment B). The industry wants to assure that this money is being well spent. However, INGAA and AGA have to object to some of the programs that have been created in FY 95 and continued in the FY 96 request as being duplicative and redundant of either the industry or other agency programs. Following are some examples:

(1) In the FY 95 budget, OPS requested $2.1 million in R&D money to examine alternative non-destructive diagnostic technologies. OPS is already spending over $2 million, authorized in earlier years, for research and development on information systems, to evaluate new pipe technology, to study the safety of underground storage, etc. However, the pipeline industry is already investing in this safety research through money they contribute to the Gas Research Institute and the Pipeline Research Committee in a coordinated research program. It does not make sense for pipeline user fee dollars to go to OPS for yet a third entity to do virtually identical pipeline safety research. Simply stated, this is unnecessary duplication.

(2) The FY 95 budget appropriated $1.2 million for OPS to begin a mapping program which would digitize the route of each interstate pipeline and overlay it for relationships to high density population areas and environmentally sensitive areas. The goal would be to have a nationwide digitized mapping system. OPS has requested another $1.2 million for this program for FY 96. To its credit, OPS has convened a quality team of representatives of oil and gas pipelines, state representatives, and certain other entities to determine how best to proceed with this project. We believe Congress should inquire as to the need for this information, the total cost of the project and the most efficient way to achieve the goal of providing OPS with good pipeline maps. The issue is not whether pipelines should supply our maps to OPS but, rather, why OPS needs such an elaborate mapping system which the industry would be required to fund out of user fees. This mapping program could become an unnecessary expense of limited resources.

(3) OPS received approval for $4.5 million in funds to hire 33 contracted inspectors. They also received $1.4 million for 15 additional full time DOT positions which includes 9 additional inspectors. They are seeking funds for 15 more employees in their FY 96 budget. We are not disputing their internal staffing. However, they have received over $4 million to contract 33 inspectors who would, for the first time, inspect new pipe as it is constructed. We already have FERC and state people in-

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specting our construction. We have to hire our own inspectors to assure that c construction is done safely and properly. We also have to subject our pipelines certain safety procedures such as hydrostatic testing before we ever place it i service. According to DOT's data, there has been only one fatality over the last years that was attributed to construction or material defects on transmission pi lines. Based on that, it is questionable whether there is a valid need for this la group of inspectors.

The second task these outside contractors would perform is to investigate pipeli accidents. Again, we investigate all our pipeline accidents as it is a key compone of a risk management program. Accident statistics have been gathered and report to DOT since 1970. NTSB also investigates any significant accidents. I also und stood that OPS internal staff inspectors are, as part of their job description, to vestigate significant accidents.

Under the reorganization going on in the Department of Transportation, there a indications that all training may be in a separate agency in DOT from OPS. T may be a good time to consider privatizing the training for state inspectors.

Clearly, funds sent to the Office of Pipeline Safety is money that the pipelir could spend on their own safety programs. We hope that Congress will reject t OPS request to increase its appropriation for FY 96 by another $4.1 million and the authorizing committees will consider placing a reduced ceiling on future s ing levels and conduct a thorough investigation of the planned uses of the unau ized FY 95 increase. We do want an effective Office of Pipeline Safety but we not want user fee money spent for redundant or unnecessary programs. We ag with the OPS vision of partnership and we would like to discuss ways to share inf mation which would assist them to do their job better and to form a true and c effective partnership.

Summary

In summary, a prime goal of the natural gas pipeline industry is to have a s system. We urge Congress to pass one-call legislation later this year. We recom improvements in the Federal regulatory process and a performance-based app to regulation. We support a demonstration program in the Office of Pipeline Sa that moves away from prescriptive Federal regulations to a risk management proach where each pipeline system can use its finite resources to address those ri on its system, recognizing there is no completely risk free environment. Finally, urge Congress to take a hard look at the user fees going to the OPS to assure t each consumer gets the maximum bang for the buck—a lean, efficient and effect Office of Pipeline Safety.

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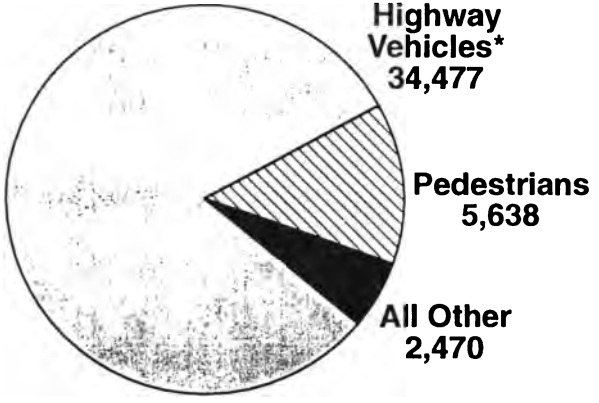
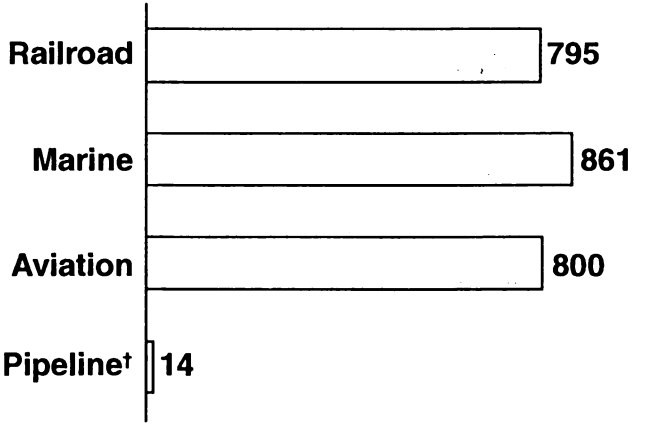
1993 Transportation-Related Fatalities

Total Fatalities: 42,585



* Includes cars, trucks, vans, buses, motorcycles and pedalcycles.

All Other



† Includes both liquid and gas pipelines. No liquid pipeline–related deaths were reported in 1993. Of the 14 fatalities, only one was related to gas transmission lines, according to DOT figures.

ATTACHMENT A

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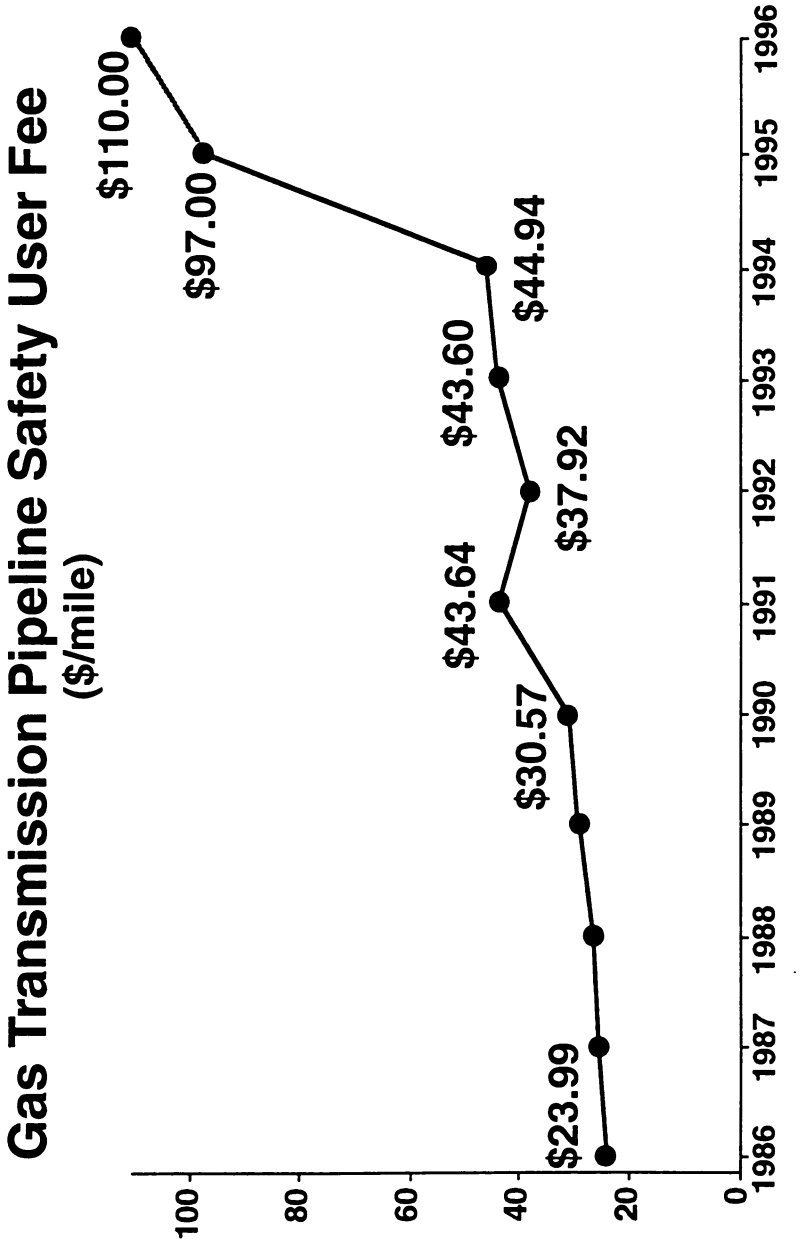
ATTACHMENT B



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Mr. SCHAEFER. Thank you very much, Mr. Hall.

Now we will hear from Commissioner Ellsworth. And if you could limit your comments to 5 minutes and we will include the balance of your comments for the record.

STATEMENT OF BRUCE B. ELLSWORTH

Mr. ELLSWORTH. Thank you very much, Mr. Chairman and members of the committee. I will be very brief. I will tell you that it is a pleasure to be able to sit on the same side of the table as my colleagues when so often we sit on opposite sides of the table.

My prepared remarks have been submitted to the committee. I will focus only on about four different issues.

First, I feel very strongly about the relationship that we have with the Office of Pipeline Safety. The States relationship with the Office of Pipeline Safety is a model for a Federal/state relationship. I tell you that, having seen it from three different seats.

In the early days of my life, I was on the receiving end of those rules when they were promulgated in 1968 and was responsible for carrying them out. On the Commission Staff, I was responsible for enforcing and monitoring them as a regulatory agency and now I see them from this seat and I am absolutely convinced that there is a much safer working environment for the industry and for their customers than there was prior to their enactment.

I am also convinced that the performance standards that are now in place need no major revisions. As Mr. Tenley explained, the success of this program stems entirely from the willingness of the industry and the Federal and state regulatory communities to work together. They are working well together. What they need now is simply to refine certain of the standards to make the issues even better and more user friendly and more customer-oriented than they are today.

As you know, the present law requires that 50 percent of the state implementation program, the program which monitors and enforces the program is supplied by the Office of Pipeline Safety. Those are the dollars that you have just discussed with the Federal side of the house. I am also sure you are aware that the other 50 percent comes from the state stakeholders and that is as it should be. The state regulatory agency gets its funds from its local distribution companies who get their money from the ratepayers' pockets. That is as it should be; they are a stakeholder and they should make that contribution.

They do and my plea here is only to assure that in conformance with the Act, that the full 50 percent funding that has been set by the Act be provided to the States. That has not been the case in the past because there have not been adequate dollars to provide that.

The Office of Pipeline Safety has made major strides in bringing that to parity and providing us with more funds but I encourage you to consider the need for that State programming as you decide whether or not to increase or limit the funds that you offer to them.

The legislation that has been proposed, that was proposed last year and is being proposed this year, we find generally commendable. The one-call notification system which was offered to you last year has been the subject of two resolutions by our national organi-

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zation supporting it. I tell you that with my hat in hand be
I have been here before speaking against it. I was, in the
stages of the one-call system, convinced that only the States n
to decide whether the one-call program was in the public int

Having authored the legislation that passed in New Hamp
I can tell you that there is a need for some Federal support
one-call system which goes beyond the gas industry's implem
tion of that support. I do not think you need to tell the State
to do it. Your present proposed legislation does not. It accepts
the States have done, recognizes their ability to refine it anc
form it to their needs. But I do think it is in the public int
for you to tell us that such a program needs to exist.

The other—we have no objections with the other provisio
your bills. Again, there is a public interest in your being mor
cific than you have before.

I will welcome any questions that you have. I will hold my
ments for those questions.

[The prepared statement of Bruce B. Ellsworth follows:]

PREPARED STATEMENT OF BRUCE B. ELLSWORTH, COMMISSIONER, NEW HAMP
PUBLIC UTILITIES COMMISSION

Dear Mr. Chairman and members of the committee: Thank you for the
tunity to participate on this panel to discuss the reauthorization of the Natu
Pipeline Safety Act. The subject is of particular interest to me because in 1
our Commission's first Staff Gas Engineer, I developed the Gas Pipeline Saf
gram for our State in compliance with that Act.

I am pleased to represent the National Association of Regulatory Utility C
sioners (NARUC), which is a nonprofit organization representing all the state
utility commissioners throughout the United States, and the National Asso
of Pipeline Safety Representatives (NAPSR), which is comprised of the reg
staff members of our commissions who focus specifically on gas pipeline safety

The NARUC has a specific interest in the organization and operation of the
of Pipeline Safety, since its members are primarily responsible for the enfor
and monitoring of the Act. In fact, within the structure of NARUC is a Sta
committee on Pipeline Safety which is solely committed to the Pipeline Safe
gram.

The Pipeline Safety Act of 1968 established for the first time a set of n
standards to be used by the natural gas industry in constructing, operati
maintaining its gas transmission and distribution facilities. As an alterna
Federal monitoring and enforcing of the program, it offered to join with any
ested State into a Federal-State partnership whereby an appropriate state
would assume the monitoring and enforcing responsibility. A grant-in-aid p
provided 50 percent financial support to those States who accepted that resp
ity. Their operations are audited and evaluated on an annual basis by fie
resentatives of the Office of Pipeline Safety.

In my opinion, the process which was established by that Act has cont
greatly to an improved pipeline safety environment. Although prior to the A
State committed resources to gas pipeline safety program, the standardization
the Office of Pipeline Safety has brought to the Nation increased each State
mitment to public safety. The funds which the Act provided allowed States t
that commitment without unreasonably burdening their own customers. T
quirement that each State provide at least 50 percent of its own moneys t
the program assured that a reasonable perspective was built into the fundin
ess and made each State its own stakeholder in the process.

As state utility regulators, we are charged by State statute with requiri
local distribution companies (LDC) provide safe and adequate service at j
reasonable rates. That responsibility presents a dilemma for regulators:
adequate service costs; just and reasonable rates limit the availability of mo
share with Federal regulators and the gas industry itself the dilemma of how
vide reasonably safe and adequate service at reasonably just and fair rates.

The cost of pipeline safety is part of the dilemma. The gas industry in Ne
land has inherited, over a period of some 150 years, a gas distribution system
is comprised of a mixture of plastic, steel, duct-tile iron, and cast iron distr

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mains and services located in areas that in some cases are impossible to replace and which, generally, continue to serve their customers adequately and safely. Thanks to the standardization of performance standards attributable to the Office of Pipeline Safety these pipelines are uniformly monitored, inspected and maintained at a level which, in my opinion, should give customers and residents the comfort of knowing that they are living within a safe gas distribution environment.

There is no question that pipeline safety comes at a cost. There is no doubt in my mind that the establishment of the Office of Pipeline Safety increased the costs of maintaining this pipeline network. Those costs increased customer bills. Those increased bills challenged the industry's ability to compete in the marketplace. It is our responsibility to assure that adequate funds are available to assure a safe gas pipeline safety environment while keeping in mind that the cost of that safety is borne by ratepayers and taxpayers.

The Federal-State fund sharing philosophy that is now in place should continue. States should reasonably be expected to bear part of the burden since it is, after all, their customers who benefit from the program and who should be responsible for supporting the costs of part of the program. The States' programs are enhanced, however, by the standardization which the Office of Pipeline Safety brings to the program, and since taxpaying residents of all communities benefit from the enhanced safety that the program brings, it is reasonable to continue to expect that taxpayer dollars contribute to a Federal portion of the program costs. I support the Federal-State program as it is now administered. I recommend that each State be entitled to its full 50 percent share of its inspection costs and that we no longer be required, as we have to date, to carry more that the 50 percent fair share than we have done in the absence of adequate funding.

The transition to a competitive market adds a new challenge to pipeline safety costs. Competition generally suggests a reduction in regulation. We must be very careful as we prod the gas industry toward a competitive environment that we do not take away from them the financial opportunities or the safety responsibilities of maintaining their commitment to pipeline safety. We must continue to assure that they are provided with the assets and the encouragement to maintain a safe pipeline network. The public has a right to expect that from all of us.

I commend the Office of Pipeline Safety for its success in standardizing the Pipeline Safety Program for the Nation. I commend it for its willingness to contribute to a Federal-State relationship that really works. I strongly recommend that the Congress commit to providing States with the full 50 percent share of its inspection procedures that it currently is empowered to do, and I support the ongoing commitment to increasing the budget of the Office of Pipeline Safety in order for it to increase and improve its commitment to interstate pipeline inspections that it alone is empowered to perform. And, incidentally, I applaud the Office of Pipeline Safety for embarking on a risk management approach to safety, particularly as it relates to the management of their own resources for their own staff operations. In my judgment, the Office of Pipeline Safety itself is understaffed. Its responsibilities in the interstate field far exceed the man hours available within the existing structure. If the Congress—and the public—continue to require more of the Federal office, then they need additional resources to meet their objectives.

Last year, as the committee well knows, four bills were introduced relative to pipeline safety. Two of them focused on one-call notification systems. One-call notification legislation passed in the House but failed to make it through the Senate. The NARUC supported the provisions of the bill passed by the House, which are identical to those included in H.R. 431 introduced by Representative Pallone. At a meeting just concluded here in Washington last week, the NARUC passed a resolution which supported the provisions set forth in H.R 431, the Comprehensive One-Call Notification Act. At that meeting, the NARUC also passed a resolution supporting the continued independent identification of the Office of Pipeline Safety in the pending restructuring of the Department of Transportation. Copies of both Resolutions are attached to my testimony. I would be glad to discuss the details of those resolutions.

Also, last year the House considered the Pallone-Lautenberg legislation relating to reauthorization. There were elements of that bill which I would commend to you.

—Higher authorization levels were set for the Grants-In-Aid program for the States. Such higher limits are essential, in view of the fact that many States are currently being denied the 50 percent funding share that the Act requires. Those States, however, are mandated to provide the full panoply of enforcement activities as if they were fully funded. I support the higher authorizations.

—Costs incurred by OPS for investigations of certain pipeline accidents would be reimbursable by the operator of that pipeline. I support that concept. However, to the extent that OPS requests assistance from the States in conducting such inves-

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tigation, then reimbursement to the States should also be included in the legislation.

—Grants to States for the establishment of One-Call Notification Systems were offered under certain situations. I support those grants.

—An electronic data base containing information on the nation and location of pipeline facilities was proposed. I support that proposal.

—The Federal Energy Regulatory Commission (FERC) would review its practices and guidelines for setting interstate gas pipeline facilities under the proposal. I support such a review, and recommend two specific additions: FERC must consult with OPS for the safety considerations of a proposed pipeline; and FERC must be bound by the findings of a state siting decision.

—The legislation would prohibit excavation or dumping within a pipeline right-of-way. I support the proposal.

—There were other issues which would enhance the public's confidence in the safety of interstate pipeline facilities which merit further consideration.

In conclusion, the Natural Gas Pipeline Safety Act put in place a system which works. It requires no major reconstruction but it can benefit from minor refinements. It has long been my opinion that the Federal-State partnership which we enjoy is a model which other Federal-State agencies could emulate.

I would be glad to entertain questions.

RESOLUTION SUPPORTING LEGISLATION (H.R. 431 and S. 164) TO ESTABLISH A MODEL ONE-CALL NOTIFICATION SYSTEM FOR CONSIDERATION BY THE STATES

WHEREAS, State one call notification systems have proven to be important elements in efforts to reduce or prevent natural gas explosions caused by third party excavation damage and, thereby, reduce or prevent harm to the public associated with such explosions; and

WHEREAS, Some form of one call notification system has been or is currently in the process of being developed in 47 of the 50 United States; and

WHEREAS, For States that have developed or are currently in the process of developing one call notification systems, 26 States have mandatory one call notification systems, of which 11 are mandatory for all excavators; and

WHEREAS, The natural gas explosion caused by a third party excavation in Edison, New Jersey, on March 27, 1994, resulting in the death of one individual and the displacement of hundreds more, signifies the importance of establishing and enforcing through appropriate State enforcement agencies mandatory one call notification systems; and

WHEREAS, On January 5, 1995, Rep. Frank Pallone (D-NJ) and Senator Bill Bradley (D-NJ) introduced H.R. 431 and S. 164 respectively, both of which are entitled the Comprehensive One-Call Notification Act of 1995, to establish a model one call notification program for consideration and/or adoption by the individual States; and

WHEREAS, The aforementioned bills do not mandate States to adopt the one call notification system prescribed in the legislation, but rather require States to consider whether adopting the prescribed one call notification system is appropriate, and authorizes $4 million to be distributed in the form of grants to States or operators who elect to adopt the elements included in the prescribed one call notification system when developing, modifying, or improving new or existing one call notification programs; and

WHEREAS, The aforementioned bills are nearly identical to legislation (H.R. 4394) which passed overwhelmingly in the House of Representatives during the 103rd Congress, but not given final approval prior to the adjournment of the 103rd Congress; and

WHEREAS, A considerable amount of time and effort has been dedicated by Members of Congress, Congressional staff, stakeholders, various associations and other interested parties toward crafting a reasonable compromise version of legislation to establish a one call notification system, which ultimately resulted in the passage of H.R. 4394 by the House of Representatives prior to the adjournment of the 103rd Congress; now, therefore, be it

RESOLVED, That the Executive Committee of the National Association of Regulatory Utility Commissioners (NARUC), convened at its 1995 Winter Committee Meetings in Washington, DC urges Congress to expedite passage of H.R. 431 and S. 164 during the 104th Congress without significant alterations to the legislation as introduced.

Sponsored by the Committee on Gas
Adopted March 1, 1995

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RESOLUTION SUPPORTING THE EFFECTIVE RESTRUCTURING OF THE FEDERAL DEPARTMENT OF TRANSPORTATION

WHEREAS, The National Association of Regulatory Utility Commissioners (NARUC) is aware of the restructuring of the Federal Department of Transportation and the method of reorganization is on fast track for submission of legislation to Congress in mid March; and

WHEREAS, The Secretary is considering assigning the Office of Pipeline Safety program within the Intermodal Transportation Administration; and

WHEREAS, The partnership between the Federal and State Pipeline Safety Programs has been successful and paramount in improving the safety and environmental integrity of pipelines; now, therefore, be it

RESOLVED, That the Executive Committee of the National Association of Regulatory Utility Commissioners (NARUC), convened at its 1995 Winter Committee Meetings in Washington, DC, urges the Secretary of Transportation to keep the identity of the Office of Pipeline Safety (Federal/State Pipeline Safety partnership), and utilize this partnership as a model for other organizational changes within the Department.

Sponsored by the Committee on Gas
Adopted March 1, 1995

Mr. SCHAEFER. I thank the gentleman very much. We do have a vote on the Floor and may have two or three behind it.

If the gentlemen could just indulge us for a short recess, we will be back as soon as possible to get some questions. Thank you.

[Brief recess.]

Mr. SCHAEFER. The Energy and Power Subcommittee will come back to order.

Now, it is in order to begin questioning members of the panel and the Chair apologizes for having to run to the Floor. We did make two quick votes and hopefully we will have some time now to get answers or questions in so the gentlemen can then be able to leave.

Let me ask a couple of questions here and this can go really to any members of the panel.

In previous testimony today, there has been a lot of discussion of how excess flow valves, automatic and remote shutoff valves and smart pigs are used by the industry. Of all the pipeline inspection safety tools available to the pipeline operator, what have you found to be the most effective way of assuring the safety of your lines and any one of you can answer if you want to expound on it.

Larry, do you want to start?

Mr. HALL. Thank you, Mr. Chairman. Let me tell you a little bit about our experience as a company because we went through an experience in Kansas, not related to our company, to another company, and we actually took a leadership role in the State in reviewing excess flow valves and remote shutoff devices.

The conclusion was, by the end of all of that and by the Kansas Commission that they were not reliable at this point; the technology was not there yet. What was interesting was some of the manufacturers of those devices wanted to impose upon the industry to offer those to the public and that put the utility in a no-win situation. For example, if you recommend it to the consumer and it doesn't work—and they don't always work, they are probably less than 50 percent reliable, you end up being liable. On the other hand, if you don't sell those devices and something happens in a home or a business, then the lawyers again say, well, you should have done a better job of selling those devices.

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So we said look, manufacturers think this is such a good deal, you represent to the public today and you sell them to the public. And what was interesting was they immediately backed off.

I think that says a couple of things. One, the technology is not completely there yet. We are working on it. We are very committed as an industry at INGAA and AGA to try to improve that technology both in terms of remote shutoff devices, as well as automatic shutoff valves, and we will continue to work toward seeing that technology is implemented.

Mr. SCHAEFER. What about the smart pigs? Do you utilize those now and what does this cost you to run a mile of inspection with a pig?

Mr. HALL. We do use smart pigs but they also only work in certain instances. In some cases, pipelines telescope down from 36-inch to 16-inch. Facilities aren't always available to accommodate a smart pig, and it would be very expensive to modify them. You have to put pig launchers in where you can launch the smart pig. That gets to be very expensive and does not work in all areas.

Smart pig technology is not completely there. For example, it would not have picked up the incident in New Jersey, a dent of the magnitude that was in that particular pipe which ultimately caused the rupture.

So the smart pig technology is not there yet completely and it is expensive. I think it is about $2 billion total if this industry were to implement the smart pig technology today throughout its pipeline systems.

Mr. SCHAEFER. On a pipeline say a mile long, same diameter, what would it cost to pig it?

Mr. HALL. Mr. Chairman, I don't have the answer to that. We can certainly provide that to you?

Mr. SCHAEFER. Any of the other witnesses?

Mr. THOMAS. Maybe I could address it a little bit from the liquid side. I guess one of the problems I would like to highlight real quickly, having prescriptive cookie cutter remedies for everything doesn't always lead to the best result. And smart pigging is a good example there.

We happen, I think in the industry, to be extremely strong supporters of smart pigging. We think it is one of the most exciting and most viable technologies out there. Personally, in my company, we run these on all of our major lines and we run them routinely and we think we can point to numerous cases where this has prevented accidents.

But there are other lines out there where running a smart pig makes absolutely no economic sense and I think we want to be careful about——

Mr. SCHAEFER. Why is that? Is that because of the difference in the diameters?

Mr. THOMAS. It may be differences, Mr. Chairman, in diameters. It may be that I have a line out here that is 30 years old and I am operating at 20 percent of the pressure that the line was designed for and I know the amount of steel I have got in the line and spending $200,000 or $300,000 to run an 80-mile line segment with a smart pig probably makes no sense at all.

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Other cases where I have got a high-volume line or I have got a line that goes through a sensitive area, then I need to know what I've got there and that is one way to do it. It is not the only tool; it is just one tool.

I think the cathodic protection program we have under DOT is clearly one of our most important programs that literally prevents corrosion and prevents leaks. So there are a lot of things happening.

I guess my point is, for every system there is probably a mix of technological tools out there that are most appropriate for that problem and that same mix may not apply to another line. That is why I think the risk management program would be so important and so valuable.

Mr. ELLSWORTH. Let me comment just on the excess flow valves. Some of our member States find them to be very helpful. In the State of Massachusetts, for instance, they are used extensively. In some other States, they have found no positive benefit from them, partly because of the contaminants that they have in their gas supply. Wyoming comes to mind where they have had experience where there have been so many failures as a result of the excess flow valves that they have been a detriment rather than an addition to the safety process.

That is what made us conclude that it should be a State-by-State evaluation as to their use. Some of the promises made by the excess flow valve manufacturers have not accurately portrayed the safety improvement levels that would result from their installation. But, again, some States have found them to be helpful and they certainly do contribute to the public perception of safety.

Mr. SCHAEFER. What, in the minds of you gentlemen here today who know this industry pretty well, is the most promising technology in development now for enhancing our pipeline safety? Are there a number of different things? It seems to me as geographically diverse as we are, varying sizes of the lines, and a variety of other factors, there may not be one thing out there that we could do to improve pipeline safety. We may have to be doing a number of things. I would like to have you expound on that.

In other words, in your own mind, what would we do to most enhance safety in the pipeline industry at the present time?

Mr. ELLSWORTH. Anything that enhances the public awareness of the existence of the pipelines is going to enhance safety. That is why the one-call system is so important.

Additionally, the industry's increased perception of safety, and they have always had a great perception of safety, but their increased commitment to safety and the opportunities that the new technology brings, such as smart pigs, certainly makes a major contribution in those areas where it is practicable to use it.

Mr. SCHAEFER. Mr. Thomas?

Mr. THOMAS. I guess with Mr. Pallone sitting there, I guess I would say the one-call is probably the thing that would most contribute to reductions in accidents. Technology-wise, again, clearly the instrumented pigs are probably the leading edge of technology that are letting us make real improvements in safety and reliability.

Mr. SCHAEFER. But they are not feasible everywhere?

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Mr. THOMAS. They are not feasible everywhere but cert
the major lines, our industry is pretty well committed
them on the liquid. The liquid side is somewhat different
gas. The instrumented pigs work very well in the liquid lir
again, it depends on the circumstance.

Mr. SCHAEFER. Mr. Hall?

Mr. HALL. One-call legislation I think is the thing th
make the greatest difference. Sixty percent of the acciden
from third parties hitting the pipeline facilities. That wo
immensely.

Smart pig is a technology that can be improved. INGAA
ing on that, as well as we make remote control valves. I t
can do a better job as a pipeline industry in monitoring c
line systems, whether you fly over them, walk the lines, mc
what activities go on along those facilities, particularly whe
is a lot of growth.

Research into how you can better improve welding pract
training that we do as a company, what other companies
proving those training procedures, not prescriptive proced
the flexibility of the companies that adopt the best practi
works in their particular area.

Mr. SCHAEFER. The Chair's time has just about expired.
like to ask one final question at this point before I turn it
Mr. Pallone.

When you acquire a new pipeline as I know you have v
do you go out and inspect that line or do you inspect it be
acquire it or do you look at the previous owner's records?
you look at that? I mean, how do you handle that?

Mr. HALL. There are a number of due diligence proc
use. One is that we will go out and actually physically in
facility. We may dig some bell holes around the line and
what the corrosion is on it. We will look at whether or not
line is cathodically protected or not from corrosion. We wil
the records they filed with the DOT if they have had any
or any breaks. We will look at their welding records, d
what kind of practices they used, so there are a whole n
of factors that we will look at that gives us a view of whet
facility is in reasonably good shape or not.

Mr. SCHAEFER. I recognize the gentleman from New Jer
Pallone.

Mr. PALLONE. Thank you, Mr. Chairman.

I wanted to ask Mr. Hall and maybe some of the others
I noticed in your written testimony as well as, you know, v
said orally that you basically had problems with the DOT
ments that exist or the final rules that are promulgated
pigs, excess flow valves and a couple of other things. And
say the most effective way of ensuring public safety is to
setting safety policies and objectives while leaving the ope
flexibility to select the tools; i.e. smart pigs, shutoff valv
of the things that I mentioned.

How do you implement that? I guess part of my concern
don't have mandates for some of these things, how do you
setting safety policies and objectives, leaving flexibility

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the tools? How can you assure me that by doing that we are still going to have safety?

Mr. HALL. Excellent question, Mr. Pallone.

I think one of the real frustrations of the industry is it has to go through the regulatory process, both from the perspective that regulations tend to be prescriptive and they say, you have to do it this way. They say, hey, we thought of a better way to do it and they say, well, you have to go into the whole rulemaking process to change that.

The second problem is there has been a view that we can't really have communication between the industry and the DOT because of the ex parte type rules. We have to follow a particular process, which means we don't have the dialogue that we need to resolve the issues that lie before the industry, we don't have the flexibility to deal with those issues.

So I think the greatest help to come is let's have industry and the government, customers out there, DOT, Office of Pipeline Safety, let's sit down. We all have the same objective; we want to have a safe system. Let's not get frustrated by having a system in place that doesn't prevent that dialogue.

Mr. PALLONE. I guess the problem, Mr. Hall, is as elected representatives and responding to the concerns of our citizens who certainly don't trust government, they don't trust industry, I don't know who they trust but I mean the bottom line is, you know, if they see, OK, maybe this accident could have been prevented by the smart pig, you said it wasn't and maybe you could follow up and explain to me afterward why it wouldn't be, you know, the concern is, OK, let's mandate or if not maybe mandate at least provide some mechanism so we have more smart pigging, so we have more automatic or remote control valves so we do some of these things.

You say, well, that is not providing enough flexibility. We want to set safety policy and objectives without having those kinds of mandates. But I am not sure how we establish that policy and still give the public the assurance we are doing something, other than just letting industry do what they want to do.

Mr. HALL. This is probably an oversimplification of it but we often ask whether some of the service we provide is what the customer wants to pay for. Obviously, we can save 42 million fatalities in this country or 34 million—or 34,000 if we just didn't drive cars anymore. I think that just doesn't make sense.

I think what we have talked about is risk management here, performance-based regulation which says, let's take a look at where the risk really lies. Like in your area, for example, you have a high population area, let's sit down and let's see what works for highly populated areas. If it is a pipeline running through Wyoming, I don't think you need to do the same things, a sparsely populated area where there are no people, that you need to do in highly populated areas.

Mr. PALLONE. I agree with you on there but I guess the problem is I don't know how you establish these objective criteria without getting to some of the specifics and I don't know, maybe you can't answer that today, but I think that is the dilemma in terms of our deciding what should be in legislation or what we should require the agencies to do in terms of rulemaking.

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Mr. HALL. We have all got to sit down, Mr. Pallone, and we got to have that kind of dialogue without restrictions from ex rules that say we can't communicate, the only way we car with this process is we will promulgate some prescriptive r tion. We need to have a dialogue that says, let's look at this a risk management standpoint, what makes sense.

I don't see why the industry and government can't do that.

Mr. PALLONE. Well, you know, Mr. Thomas mentioned, and I am not clear on this, when Mr. Tenley was here before and trying to draw a distinction between the type of risk mana that he proposed and risk management proposals that are c from the industry, you mentioned, Mr. Thomas, you said yo two improvements. First a requirement that the Secretary co risk assessment cost/benefit analysis during the developme regulations and, second, statutory language allowing OPS to lish a voluntary project to demonstrate the effectiveness o management programs as an alternate means of regulatory c ance.

This is some sort of voluntary risk management? Explair that differs from what OPS wants to do because I don't under

Mr. THOMAS. I think we are headed down the same pa doesn't mean that there aren't minimum standards out ther cause clearly there are. There are minimum regulatory comp standards that you have to meet regardless.

We are saying as we go forward, though, it would be helpf Mr. Hall said, to be able to sit down with DOT and say, all here is a system we are operating in, let's say, Oklahoma an are our concerns, here are the safety concerns. Do the risk ment and then determine what safety program meets th quirements. We can do that and I think what we will find i those programs can be a partnership, basically, between ind DOT and the public that will satisfy everybody's needs and think they differ depending on the circumstances.

What we may do on a crude gathering line in Ohio may b different than a products line I have in your district in New J

Mr. PALLONE. So what you are saying——

Mr. THOMAS. We need flexibility.

Mr. PALLONE. I know but both you and OPS are saying they flexibility. I just don't understand the distinction. I really d don't understand what you are asking be done on a pilot basis

Mr. THOMAS. I think really just see how the program work how we do. We have got a task force now between OPS an industry looking at how we can do risk assessment, risk ma ment and then actually try that in a pilot with DOT, volun with some industry companies. Say, all right, let's try that a how this process works and see what kind of problems we ru rather than starting out and say we are suddenly going to risk management on everything tomorrow. We are probabl prepared for that. Let's work our way into it and see how the ess works.

It is a new philosophy. It is really a partnership between the stakeholders and I think it is one that will work very well

Mr. PALLONE. OK, well, maybe we can——

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Mr. THOMAS. There are minimum compliance standards that are still there. You would not operate it without some compliance standards.

Mr. PALLONE. I don't want to keep belaboring this, Mr. Chairman. I guess the reason I get confused is because when we passed the risk assessment bill out of this committee which passed the House, I was making the argument that we needed flexibility and that you shouldn't use a straitjacket, if you will, in our legislation for every agency because every agency should have flexibility of dealing with risk assessment, depending on what their agency thinks is important in the circumstances.

Now, Mr. Tenley seemed to say that, you know, he was concerned about that bill because he sees—he didn't want to be in a straitjacket. On the other hand, you're saying you don't like the OPS policy now because maybe it is too much of a straitjacket and you want flexibility so it is hard, you know, it seems like there are so many risk assessment ideas going out there maybe we need to talk about it more another day.

Let me ask Mr. Hall one more thing, though. Again, this is about the information and I guess this mapping proposal. You said you are concerned that OPS needs better information on which to base its regulations, OK. But later on I got the impression that this mapping program, you know, you think should maybe be relooked at and maybe it is not a good use of resources and doesn't need to be done.

How are we going to get more information? My understanding was the reason they want to do this mapping was because they don't have enough information and they have to go back to industry when an accident occurs and ask for information. It would seem to me that doing the mapping would be the best way for OPS to have more information so I don't understand why you would be opposed to it.

Mr. HALL. I don't think it is the electronic mapping systems itself that we are concerned about. Again, we are concerned about prescriptive regulations coming out and saying the electronic mapping system has to look like this, one, two, three, four. Our particular company already has—is implementing an electronic mapping system that is going to cost us about $8- to $10 million when we are completely finished. We will have everything on our system completely mapped, we will be able to drill in or a compressor station, we will have a picture that will actually come up on the screen that will show the compressor station. You can drill down to a valve, it will tell you when that valve was installed, how many times it has been replaced, it will tell you the condition of pipe on our system. That all takes some time.

What I am afraid of is that we get prescriptive regulation over here that says, well, we don't really like that system, because obviously we use it for other reasons too. We use it for marketing purposes, we use it to compete. And we don't want an agency to come and say, it has got to look like this when we have already developed a system which works.

Mr. PALLONE. You don't have a problem, per say, with the OPS going ahead with this mapping system that they have proposed, themselves?

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Mr. HALL. I don't want to pay for it. They can certainly have information that we have but I don't want to pay for another system.

Mr. PALLONE. Because you think it is duplicative?

Mr. HALL. Pardon me?

Mr. PALLONE. You think it is duplicative. You already have it so why do they need it?

Mr. HALL. That's right. It works and they can see it. We filed plats with all the towns. We operate in about 300 communities in our leasing operation, we have maps on file, we go around with the fire departments that are in our municipalities as well as the areas, go through our pipeline system with them, say here are the procedures you need to follow in case there is an accident out there and somebody hits our pipeline. That kind of educational process goes on and on across our system.

What about the inspectors? We had asked before about they are asking for more money and I take it the major reason they want more money and increase the fees in part is because they want to hire double the number of inspectors. You seem to be questioning that as well.

I mean, I guess part of my problem is that if you say, OK, we are going to do a lot of the inspection ourselves an we don't need the Federal inspectors, which is maybe your argument and I don't want to put words in your mouth, but if that is the argument and you can tell us that it is, you know, I get the same old thing again which is local people, residents don't necessarily trust—not that they trust the Federal Government either but they tend to think industry is biased and perhaps the Federal Government is less so and they want inspections to be done by at least the Federal Government or the government because they are theoretically unbiased.

You are opposed to the additional budgeting for these added inspectors? And why is that?

Mr. HALL. Part of it is, I guess, my experience with government regulation, it gets to be a "me" issue. We could run a perfectly perfect pipeline. I guarantee you when an inspector comes out, just by his job he is gong to find something wrong, the color of the paint is not red, the color of the paint is not blue, something there.

The best inspectors that we have are our field employees. They know what they are working around and they do not want to work around an unsafe system and that is a high priority in our company. I think our employees know that, that is true across the industry.

The employees are the best ones, the field people are the best inspectors that you could have over and above the government.

Mr. PALLONE. I guess the problem is, you know, an age-old thing. Certainly in the aftermath of the Edison accident, you know, as much as Texas Eastern tried to do a lot of things and I thought that was very helpful, there was a natural distrust and people wanted the Federal Government to come in, they wanted OPS to do inspections.

I am not sure that we can say that we don't need more Federal inspectors because the industry is going to do its own inspection. I mean, it is a basic problem in that the public feels there should be some sort of independent inspection.

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I don't want to dwell on that. I just point it out because of what you said.

The last thing I wanted to ask was Mr. Ellsworth about these grants and aid programs to assure 50 percent funding share for States, this is another—this is a case where the States do inspections of the pipelines?

Mr. ELLSWORTH. In all cases, in 55 of the 63 States that are involved in pipeline safety, the arrangement under the Pipeline Safety Act of 1968 is that the Office of Pipeline Safety provides the funding for the States to do the monitoring and enforcing of all the intrastate gas operations. The distribution company operations.

The Office of Pipeline Safety itself monitors and inspects the interstate pipeline operations. For that service, OPS funds 50 percent of the safety programs that the States monitor and enforce.

Mr. PALLONE. Basically, we have got all kinds of inspections going on. We have got your own industry inspections.

Mr. SCHAEFER. Would the gentleman yield?

Mr. PALLONE. Sure.

Mr. SCHAEFER. Mr. Ellsworth, you said 55 of the 63 States?

Mr. ELLSWORTH. Yes, sir.

Mr. SCHAEFER. Did we add some or something?

Mr. ELLSWORTH. Of the 63 different entities that are in the inspection programs for the States. I misspoke. I didn't——

Mr. SCHAEFER. I didn't know whether we added a couple of States or not and I was trying to figure that out.

Mr. ELLSWORTH. That hasn't yet become a regulatory responsibility.

Mr. PALLONE. Maybe it has to do with parts of States wanting to secede from other States, I don't know.

Just so I understand, under these grants, it encourages the States to do the inspections of pipelines that are only within the States' jurisdiction?

Mr. ELLSWORTH. Yes. The Office of Pipeline Safety itself is responsible for putting field inspectors out to monitor the interstate pipeline projects among many other things that they are asked to do. That is one of the things that they say they are incapable of doing because they don't have the resources to do it.

Mr. PALLONE. Then you also mentioned prohibiting excavation and dumping on pipeline right of ways which is a big issue for me because of what happened in Edison.

What are States doing there? Are there variations in that respect? Do they have criminal penalties, do they have, you know, civil penalties for dumping?

Mr. ELLSWORTH. Not for that specifically but the idea certainly has merit and you have more experience in that issue than most. It is a common sense issue. It is a matter of whether or not the pipelines and the LDC's can adequately monitor their pipelines without the added tool that you here give them. And I suggest this is a good tool to give them.

Mr. PALLONE. I guess I didn't ask you the question. You said that the smart pig would not have prevented the Edison accident. Why is that?

Mr. HALL. My understanding—I am not an expert—my understanding from talking to my people and people in the industry that

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it was a kind of bend in the pipeline that the smart pig does not pick up. It does not pick up some of the horizontal type fractures or bends in a pipeline. This was such that my understanding is it wouldn't detect is.

Mr. PALLONE. I see. I am not sure if we actually have an absolute final determination of how the accident happened but it would be interesting to see if that is the case.

All right. Thank you very much.

Thank you, Mr. Chairman.

Mr. SCHAEFER. I thank the gentleman.

I want to get back to this question that I had asked Mr. Tenley and again looking at the chart that we have up over there, I am very concerned in trying to get some answers to why all of a sudden we are having a doubling, more than doubling over the next couple years in the user fees.

I would like to ask Mr. Hall or anyone else, does the method of assessment of the pipeline user fee have an adverse impact on the competitive way business is conducted in the marketplace? And I would imagine it does simply because of the cost. And the reason I am bringing this in is because of the Altamont Pipeline being proposed down from Canada into Wyoming and the concern that we have certainly in the Rocky Mountain area of competitive pricing.

Here we are getting to a situation that I am certainly going to get some answers to as far as why this is doubling up. Do you want to comment on this, Larry, or any of you?

Mr. HALL. Certainly. From the industry's perspective, there have been major changes since 1986. In 1986, the pipeline industry was very heavily regulated, the costs were passed on to the consumers through rate cases that were filed periodically.

Since that time, Order 636 was passed by the Federal Energy Regulatory Commission which has unbundled all the services by the pipelines and we now have a very competitive industry. Competition has set in to the point where any additional costs that are added on to this industry makes it difficult to compete, whether it is among each other or whether it is with a Canadian pipeline that goes across Canada and serves the Pacific Northwest or the New England States.

From our personal perspective as a company, I am just speaking for KN, it has had a dramatic difference because the assessment is on a per-mile basis and you can have a large diameter pipeline that has the same number of miles that we do, we have 20-some thousand miles of pipe in the ground, we are one of the larger pipes in terms of pipes in the ground, but we have smaller diameter pipe and we have less throughput to spread that over.

When you are in competition with a big guy and you have these kinds of costs that, you know, $24 was significant but now $110, that could make us uncompetitive. If it were based on a throughput/mileage basis, it would be a more even playing field.

Mr. SCHAEFER. When I asked that question of Mr. Tenley, as you know, he indicated maybe the diameter should be taken into consideration in the charge per mile.

Do either of the gentlemen wish to comment? Yes, sir, Mr. Ellsworth.

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Mr. ELLSWORTH. With regard to the increase in the Federal budget, I can confirm that the contributions or the moneys given to the States in 1994 compared to any previous year far surpasses what we had gotten before. For many years, many States got only in the 20 or 30 percent allocation when, remember, the law said that they were supposed to get 50 percent. In 1994, some 33 of the 50 States got at least over 40 percent so some of those dollars came to benefit our state programs.

Mr. SCHAEFER. DOT justified some of this increase as a point that they had hired double the number of inspectors. Do you get the sense that with double the inspectors, they have found more violations or double the violations? Do you have any idea on this?

Mr. HALL. From my perspective, from our company's perspective, I am not inviting DOT to come out and find something, but I don't think it has gone up in our pipeline, and I am not aware of other pipelines in the industry.

Mr. THOMAS. Clearly, there is a lot more inspections right now. I mean, there has been a dramatic increase and they are not all bad. They have helped us find some things. Yet, at the same time, this takes a lot of time and effort. I mean, we do a lot of things for compliance sake. Sometimes you would like to step back and look at your overall safety program and right now all of the pipeline companies are running just as fast as they can to stay in compliance.

Every time we get a mandate, and I know mandates sometimes are the easy way out, it takes immense amounts of capital and time to comply. This little mapping mandate we are talking about will cost the industry millions and millions and millions of dollars plus huge amounts of time. It is not that we don't have the maps. The maps are there, the data is there. But sometimes something that sounds very nice and very straightforward contributes greatly to the amount of time and people we have on these things, costs that aren't shown up there. It is costs that are involved in meeting these mandates.

Mr. PALLONE. Mr. Chairman, would you yield?

Mr. SCHAEFER. Certainly.

Mr. PALLONE. I guess I am still confused about this mapping and I don't want to keep prolonging it. But my understanding was that OPS wanted to do mapping and have it available in the event that they were called upon, you know, as an agency to provide the mapping. I don't disagree with what Mr. Hall said, you know, that it may not necessarily be a good idea to prescribe how you do your individual mapping. But my understanding from what Mr. Tenley said was not so much that he was telling you how to do your mapping but that they wanted to have on hand a national mapping program available so that when called upon as an agency to provide maps or whatever that information would be available. That is not the case?

Mr. HALL. My understanding is what they are looking at is a uniform mapping system so that they have one system that fits everybody's needs. That doesn't work.

Mr. PALLONE. So, in other words, you don't have a problem per se if they want to establish a mapping system and gather all the

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information. You just don't want to be told how to go about it individually.

Mr. HALL. We can send them what we have in terms of electronic mapping and they can have a computer—it may not be the same one that another company uses but they can have a piece of that software and see what that map is. Or they can come out to our offices and we will take them right through any piece of the pipe that they want to take a look at.

Mr. PALLONE. Again, I don't want to keep going but I think that it is important, in my opinion, for OPS to have the documentation because the bottom line is that they have not had that and they have been criticized for it. However we go about that, I guess we can argue. But I think it is important that it be available.

Thank you, Mr. Chairman.

Mr. SCHAEFER. I thank the gentleman. With the remainder of my time, I would just finally hit on one other issue and in looking at the pipeline industry it would seem to me that it is to your benefit the fewer problems that you have. You certainly don't want them to happen, not only from the loss of life but from your insurance costs.

I don't know, I just wanted to ask the question, how do the insurance companies rate their costs on what you have to have for liability insurance and this? And it is one thought that just came into my head but this is another big issue when it comes to safety. I would imagine the more safety conscious you are and the fewer accidents you have, the less your insurance is going to be.

Do you want to just briefly tell me how they figure out you insurance on any of these lines and companies?

Mr. THOMAS. A lot of our companies, for instance, like BP, are self-funded. So the impact is bottom line.

Mr. SCHAEFER. I see.

Mr. THOMAS. If we do something out here that causes an accident, any kind of an accident, it becomes a major expense. If you do something that costs you $10 million, it is going to show up on your bottom line.

Mr. SCHAEFER. I see.

Mr. THOMAS. A pretty good incentive to operate safely.

Mr. SCHAEFER. Mr. Hall?

Mr. HALL. Ours is a combination. We are partly self- insured. We are partly insured. You are right, if our safety record is not good, we will see our insurance costs go up.

Mr. SCHAEFER. Mr. Ellsworth?

Mr. ELLSWORTH. In New Hampshire, our companies are small. They still accept a lot of the self-insurance responsibilities. I guess I would suggest that no matter how much regulatory authority we impose over them and their safety programs, it is the industry that has the most to lose and has the most perception or perspective on their safety programs. They are the ones that have dollars to save from insurance costs. They are the ones that have a reputation to lose if they have an unsafe program. There is no one watching over the industry as well as the industry looks over itself. But I do think there is a role for us to play and I do think the pipeline safety standards have played a major role in assisting them in doing just what they have been trying to help themselves do.

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Mr. SCHAEFER. The committee thanks the gentlemen for being here today. We, at this point, don't have any more questions but I would like to keep the record open in case Mr. Pallone or anyone else on the committee would have any additional questions and for any other parties that are interested in this to be able to comment.

I also, without objection, would like to put the opening statement of our full committee chairman, Mr. Bliley, into the record.

[The prepared statement of Hon. Thomas J. Bliley, Jr., follows:]

STATEMENT OF HON. THOMAS J. BLILEY, JR.

Mr. Chairman, I'd like to commend you for holding this timely hearing on the reauthorization of the Natural Gas and Hazardous Liquid Pipeline Safety Acts. These Acts expire September 30 of this year thus it is important that we begin the process of formulating the reauthorizing legislation early.

The safe operation of natural gas and hazardous liquid pipelines is of deep concern to me. Since 1980, there have been at least seven pipeline ruptures in the State of Virginia. The most recent occurred in Fairfax County, Virginia when approximately 9,000 gallons of diesel was spilled due to damage to a pipeline caused by a third party. Another accident in 1989 caused the City of Fredericksburg to shut down its city water intake when 5,000 gallons of kerosene spilled into the local waterway.

When a pipeline ruptures, it not only poses a danger to humans but it also threatens the environment around it. Thus, I believe it is vitally important that our natural gas and oil pipelines are operated in as safe a manner as possible. This hearing is the first step in the process to begin looking at how safe our national pipeline system is and if the laws by which they are regulated can be improved so that pipeline safety is enhanced.

In the past, the Congress has approached pipeline safety by requiring the Department of Transportation to implement Federal minimum standards with which all pipelines must meet. Recently, both pipeline operators and the DOT have agreed that a risk assessment and risk management approach to pipeline safety might result in improved safety and lower costs. This committee is committed to the concept of risk assessment and I am pleased to see both the administration and industry exploring ways to make it work for them.

I look forward to hearing from the witnesses and working towards developing responsible and effective pipeline safety legislation.

Thank you.

Mr. SCHAEFER. Thank you very much.

This committee is adjourned.

[Whereupon, at 12:55 p.m., the hearing was adjourned.]

[The following material was received for the record. Materials received from the National Transportation Safety Board, including a Pipeline Accident Report and a Special Study, are retained in the subcommittee files.]

PREPARED STATEMENT OF J. BAUMOEL, PRESIDENT, CONTROLOTRON CORPORATION

Thank you, Mr. Chairman, for accepting my response to Congressman Pallone's request for testimony before the Subcommittee, on the current state of the art of Leak Detection for improved Pipeline Safety.

First let me present our credentials in the area of leak detection experience and expertise. I, and my company, Controlotron Corporation, now in operation for 33 year, are members of the American Petroleum Institute, and are dedicated to the objectives of that organization. As you may be aware, the API has instituted the STEP program, which has as its objective the protection of the environment. It is our experience that the entire industry and its component companies are dedicated to achieving this purpose, limited only by the available technology and the economic realities associated with available leak detection systems.

Controlotron is an internationally recognized supplier of System 990 Clamp-on Transit-time flowmeters, having companies in Europe, the Far East, Mexico and South America dedicated to the export of these computer based instruments manufactured here in the United States. Literature is available which describes the

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990LD Leak Detection system, and the non-intrusive 990 flowmeter, which key component of the 990LD leak detection system.

In brief, the outstanding issue in regards to the release of pending pipelin regulation per 49 CFR Part 195, as published in the Federal Register, Volu No. 12, of January 19, 1994, which projects a requirement for installation c matic Control Valves, (ACV), and Remotely Controlled Valves, (RCV), is a d uncertainty regarding the existence of a suitable leak detection system to the valves in the event of a release. Controlotron responded to the DOT C Pipeline Safety's solicitation for advice in this regard, via a letter dated A 1994 to Lloyd Ulrich of DOT, and by a subsequent visit to him.

It was, and remains, our opinion that the current state of the art of leak tion, as represented by Controlotron's System 990LD leak detection system, p the necessary practical, affordable and easily installable leak detection which is defined by the DOT Federal Register solicitation to be an essential nent of an ACV or RCV installation, to protect against uncontrolled pipelir age. In addition, it is our opinion that installation of such an affordable and e leak detection system would in some cases preclude the need for installation tional valves, and invoking expensive and unwieldy procedures, such as hyd pressure testing, which are now under consideration.

The 990LD system detects leaks by actual measurement of flow into and pipeline segments bounded by 990LD Site Stations, declaring a leak alarm flow into the segment is greater than the flow out of the segment. Detection tinuous, with reports made once per minute, day and night, which alerts t line operating staff of a leak immediately. The system also automatically down the valves to limit the size of a leak, should one occur. The length of th itored pipeline segments can be short, as in the case of high risk populated ronmentally sensitive areas, or long, as in the case of low risk unpopulated Thus the cost of the system can be readily accommodated to the character terrain in which it will be installed.

What makes the 990LD system particularly applicable to the task of leak tion is its non-intrusive nature, with all flowmeters mounted to the outside pipe. Thus installation does not require cutting into the pipe, or shutdown pipeline, and is therefore ideally suited to the many pipelines which are alr existence and in operation. For this reason, the 990LD system is modest in i tion cost, and also very reliable, since the flow sensors have no moving p are not exposed to corrosive or wear inducing components of the liquids. In this leads to very fast installation, with systems installed and made operat as little as two months after order, as was done for a 990LD system supp the United States government's Defense Fuel Supply Center. Purchase of th tem is available by GSA contract, which provides a cost discount to the gover

A key factor in the acceptance of System 990LD is the fact that, alone am few types of leak detection systems available, it offers a cost payback to the operator through the additional functions that it provides for Pipeline Man These include valuable Interface Detection, Batch Tracking, Liquid Type ity Indication and Leak Location functions. As a result, most of Con tomers who originally purchased System 990LD solely for leak d[illegible] panded their systems to take advantage of its other cost saving pipeline ment functions.

System 990LD and related Controlotron instruments are now installed both United States and Europe. Systems are now being solicited for installation i ico, South America, China and the Pacific Rim. Among our references for performance are such companies as Exxon, Sun Pipeline, Arco, Alyeska (the Pipeline), Snam (the Italian government oil company), TAL (the German Tr pine Pipeline), and of course the United States government's DFSC. In where leak detection is required for operation of a pipeline, Controlotron's received approval from TUV, whose approval is required for acceptance of t detection system.

In short, the 990LD is a proved system which makes practical, cost effect functionally effective leak detection available, today, and on essentially any pipeline flowing crude, refined petroleum, and compressed or liquefied gas. I only affordable, but provides a cost payback to the pipeline operator in in pipeline operation and management. It can be installed on any pipeline v ly, in many cases within only weeks after order. It has been universally in all installations, and has many available references as to its effectivity. as important, its non-intrusive Clamp-on construction makes it practical onstrate its effectivity on any candidate pipeline. This can be done very qui only days. This permits pipeline operators to have successful operation co even prior to ordering the system.

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It is our experience that most pipeline operators would welcome reasonable and effective regulation. This would serve to level the playing field, since under present circumstances, those who undertake the expense of installing a leak detection system may see themselves to be at a competitive disadvantage against those operators who choose not to do so. We also perceive that the present uncertainty as to what the ultimate regulations would require is causing many pipeline operators to hold back on installing a leak detection system, for fear that a subsequent regulation would make their choice inadequate to meet a future regulatory standard. Thus despite the dedication of the entire industry to the issue of pipeline safety, the protection needed now, and now available, is being retarded because of regulatory indecision.

In addition, some of the proposed requirements are potential disasters for pipeline operators. Take for example the proposed Hydraulic Pressure Test, which would require emptying a pipeline of product, and filling it with water. Where does one store the vast quantity of product now in the pipeline? How long will it take to fill the pipe with water, run the test, and then purge the pipeline of water so as not to contaminate product when it is reinstalled in the pipeline? How does one clean up the vast quantity of water which will be contaminated during the hydrostatic test by the residual oil in the pipeline? And since such a test is only run periodically, separated in time by months and even years, how effective is such a procedure in protecting the pipeline from corrosion or damage suffered in the intervening period?

Wouldn't it make more sense to exempt any pipeline operator from such a hydrostatic test if they had installed a system, such as the Controlotron 990LD, which monitors the existence of a leak, even a small one, on a minute by minute basis, and automatically closes the pipeline valves in the event of a detected leak? In fact, with the continuous monitoring provided by System 990LD, safe high pressure testing of the pipeline could be done frequently, without replacing the pipeline's normal product with water. Under these circumstances, the time has come to issue sensible regulations, eliminating the Sword of Damocles of presently unissued regulations now hanging over the industry.

Since the responsibility of making a decision to impose regulations which affect the pipeline operators, the public and the environment, falls to legislators and other nontechnical individuals, it is not surprising that such an important decision is taking much time. During the intervening time the lack of decision is actually costing pipeline operators unnecessary expense and financial liability in the event of a leak, not to mention the continued risk to the public and the environment.

Since timely action is in everyone's interest, it seems that the threat of regulation, uncertain as to the time and content of its issue, should be replaced by decisive action on cost effective regulation, based on use of proved technology, such as the 990LD. It appears that incentives, to help individual companies defray some of the cost of installing such systems quickly, would in the end cost the pipeline operators, the government and the public much less than the actual cost of continued uncertainty and delay.

Since the question of the actual availability of an affordable and effective leak detection system must be resolved in the minds of both the legislators and regulators, to permit decision on the publication of effective Pipeline Safety regulations, it is essential to establish its availability as a fact. Fortunately, this can be easily accomplished, even in a committee room environment, by replay of actual archived 990LD leak detection system data, memorized at actual field installations by the 990LD system's Master Station computer. Even nontechnical individuals see compelling evidence of the effectivity of the system's leak detection capability, and its cost payback pipeline management features, illustrated in the computers simple graphic screens. In addition, the non-intrusive nature of the system permits it to be evaluated in only weeks by actual installation on a candidate pipeline.

Thank you, Mr. Chairman, and Mr. Pallone, for the opportunity to present this testimony.

PREPARED STATEMENT OF DR. THEODORE L. WILLKE, VICE PRESIDENT, OPERATIONS R&D, THE GAS RESEARCH INSTITUTE

The Gas Research Institute (GRI) appreciates the opportunity to submit testimony for the Record to the Energy and Power Subcommittee for its hearing on pipeline safety. GRI recognizes the need for a well-maintained, state-of-the-art pipeline system, and appreciates this Subcommittee's efforts to collect the most current information in order to make informed decisions during consideration of the pipeline safety reauthorization bill.

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GRI is the research, development and demonstration (RD&D) management or nization of the natural gas industry. Its mission is to discover, develop, and technologies and information that measurably benefit gas customers and en the value of gas energy service. GRI accomplishes its mission by planning and m aging a consumer-sensitive, cooperative research program emphasizing technol transfer.

GRI is governed by a Board of Directors whose membership represents i and intrastate pipelines, major and independent producers, investor-owned tion companies, municipal utilities and gas users. GRI relies on four board leve visory bodies, each with a special area of expertise to advise the Board on pu issues regarding energy policy and to provide recommendations on program pr ities and overall budget balance. This advisory process ensures that the bene from research funds are maximized and that GRI's program complements ot known research efforts and avoids duplication of resources. The results of GRI-sp sored research is shared with all member companies.

GRI devotes approximately $18 million or 10% of its annual RD&D budget to transmission pipeline issues, and about 50% of the transmission research progr addresses pipeline safety. The objective of the GRI pipeline safety research progr is to enhance pipeline safety and reliability of service at a reasonable cost to gas consumer.

INDUSTRY COMMITMENT TO PIPELINE SAFETY R&D

Cooperative research on the structural integrity of natural gas pipelines be over 40 years ago, with the formation of the Pipeline Research Committee (P of the American Gas Association.

In 1986, GRI, in coordination with the AGA, initiated work complementary to t of the PRC on internal pipeline inspection. Since then, the GRI research progr has expanded to include: nondestructive evaluation of in-service pipelines, the me anisms and prevention of corrosion, pipeline monitoring and leak detection sys decision support systems, and advanced computer and sensor technologies. Ga also conducting extensive safety-related research on pipeline operations and mai nance, including pipeline repair and rehabilitation, compressor maintenance, design of pipeline crossings beneath rail lines and highways. Together, the pipel safety research programs of the PRC and GRI focus on pipeline design and constr tion, damage prevention, pipeline inspection, and pipeline integrity.

Responding to public concerns about pipeline safety, GRI took steps in 1994 broaden its pipeline safety program in support of the Pipeline Safety Action P of the Interstate Natural Gas Association of America (INGAA). GRI added proje in its 1995 RD&D program to address (1) damage prevention/one-call systems, risk assessment/pipeline integrity determination, (3) nondestructive evaluat methods, and (4) automatic and remotely operated valves.

GRI RESEARCH STRATEGY

GRI has a three-part strategy for its research related to pipeline safety. The egy addresses pipeline inspection, pipeline integrity, and pipeline monitoring. ... projects are underway to help gas pipeline companies detect conditions that co lead to unsafe operations, to improve methods for monitoring pipeline system int rity, and to take effective actions to enhance safe operations. Related research is rected to preventing damage to pipelines, methods for repair and rehabilitation, the development of advanced systems and components.

1. Pipeline Inspection. Recognizing the expense and limited ca lities of day's "smart pigs" used for internal pipeline inspection, the first el of the C research strategy addresses the capabilities of current pipeline ... ion te nology. Efforts are under way to develop new technologies for use in ... rat smart pigs. In 1995, GRI will complete the construction of a worl... Simulation Facility (PSF) for testing smart pigs, pipeline operating practices, advanced pipeline technology under the conditions of gas pressure and flow fo in operating pipeline systems.

2. Pipeline Integrity. Maintenance of pipeline integrity is a critical aspect system safety, reliability of service, and cost-effective business operation. The sec element of the GRI strategy is the development of improved tools for pipeline c panies to use in designing coordinated, cost-effective strategies for inspection, itoring, and maintenance. An integral part of the strategy is the developme guidelines and methods for applying the principles of risk management to pipel operations.

3. Pipeline Monitoring. The third element of GRI's research strategy is field-based evaluation of new and emerging technologies for monitoring the co

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tion of the pipeline and its surroundings. The industry is moving rapidly to take advantage of recent major technological advances in telecommunications, microprocessors, satellite sensing and global positioning systems, and the power of advanced computer and software systems.

PIPELINE INSPECTION

In-line inspection (non-destructive examination) for defects in operating gas pipelines was introduced to the pipeline industry in the mid 1960s. Conventional smart pig technology using magnetic sensors is by far the most widely used in-line inspection technology. However, conventional smart pigs do not provide all of the information needed to assess the fitness-for-service of modern pipelines. Even so-called advanced smart pigs are limited in their ability to detect cracks, defects in pipe seams, defects in girth welds, defects in the pipe materials, and damage caused by third-party contact.

Recognizing these deficiencies, GRI has dedicated $5.5 million of its pipeline research budget to the assessment of the capabilities of *available* in-line inspection technologies, and to the development of *advanced* inspection methods to provide the additional data needed for adequate pipe assessment.

Smart pigs are propelled through a pipeline by the pressure of the flowing gas. By operating from inside the pipe, the sensors can be in contact with the pipe wall. There are no other commercially available means for gathering the type of data that pigs can provide which is comparable in terms of data quantity, accuracy of measurement, timeliness and cost—in spite of the limitations. The inspection task is to find defects that are smaller than one (1) square inch in the pipe wall. A smart pig traveling at 10 miles per hour in a pipe 3 feet in diameter must inspect nearly 1,000,000 square inches of pipe surface per minute.

Commercially available pigs cannot do everything required to ensure safe operating conditions of pipelines. Using state-of-the-art technologies, smart pigs **can:**

- detect metal loss from corrosion,
- identify the location and elevation of points along the pipeline, and
- identify gross pipe deformations, such as dents.

Smart pigs **cannot:**

- measure most metal loss defects with sufficient accuracy to assess their severity,
- identify cracks anywhere in the pipe,
- detect weld defects and defects near welds, or
- reliably detect and characterize damage caused by third parties, such as excavating equipment.

While conventional smart pigs do provide some useful data, it is important to understand the more than half of the 280,000 miles of cross-country pipelines are not "piggable." That means that smart pigs cannot travel through the pipe without extensive and costly modification. In a yet-to-be-released report, we have found that only 25% of all gas transmission pipelines can be pigged today. Another 20% of existing pipelines can be modified to accommodate the passage of smart pigs with some capital investment which may include installation of launchers and receivers. Much of the remaining pipe would require substantial modification to accept smart pigs. And some pipelines because of their location and design cannot be modified to accept smart pigs.

In its quest to address pigging issues, GRI has embarked on a broad ranging research and development program to address the many impediments to effective in-line inspection of pipelines. One of the initial steps was to build the laboratories and full-scale test facilities necessary for advanced research and development. GRI initiated assessments of the most commonly used magnetic technology called "magnetic flux leakage" to determine where truly meaningful advances can be made. Our research is being used in the improvement of sensors and related technologies used on smart pigs. GRI is also developing advanced technology for detecting metal loss, crack detection, and dents and gouges caused by mechanical damage. GRI is also evaluating technologies for inspecting pipelines which are not piggable with tools available today.

Pipeline Simulation Facility. As previously mentioned, GRI is completing the construction of a world-class facility, known as the Pipeline Simulation Facility (PSF), for the development of pipeline technologies. Designed for the full-scale development and testing of pipeline inspection technology as well as operating and maintenance equipment and procedures, this facility can simulate virtually all pipeline conditions.

The major component of the PSF, the flow loop, looks like a typical section of the 280,000 miles of gas transmission pipeline that serve the U.S. The mile-long, 24-

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inch diameter flow loop includes a compressor (gas pumping) station that is dup
tive of many found in actual operation, and passes beneath roads, simulated
beds, through wetlands. It contains virtually every feature encountered by
operating systems. It can operate at pressures up to 1000 pounds per square
a very common pipeline operating pressure. It contains valves and fittings, con
and safety devices common to operating pipelines and, although it is not an op
ing pipeline in a regulatory sense, it was constructed to the Department of Tr
portation's Safety Standards (49CFR192) for gas pipelines.

Although the PSF can mirror actual pipe defects that are occasionally four
operating pipelines, it is not limited to the development of pipeline inspectio
vices. It is capable of simulating and evaluating pipeline components, construc
and operations and maintenance.

GRI has also provided ancillary laboratories and tools necessary to make the
complete research facility. Perhaps the most significant of the research tools are
pipeline inspection devices (pigs) that have been specially constructed to facil
research; one for testing magnetic sensors and one for evaluating ultrasonic
other advanced technologies.

The construction of this facility is nearing completion and it will be d
May 25, 1995. It will immediately be put to use by GRI, inspection s
nies, and pipeline companies.

PIPELINE INTEGRITY

Pipeline companies have long recognized that maintaining the structu in
and physical condition of the pipeline is a responsibility that ensu
and allows cost-effective pipeline operation. GRI brings new techn
of maintaining pipeline integrity in the areas of corrosion control.
tion, risk management, pipe repair systems, and the rehabili
tems to bring them back to like-new condition. With appro
line integrity and maintenance, pipeline systems can last in
GRI has brought new information and technology to the p
vention and control. Work has been conducted in the areas of cathodic prote
measurement systems, pipe coatings, and the mechanism of corrosion. Pion
work in biological corrosion is leading to the development of environmen
methods for eliminating the conditions that lead to bacterial action.

Where corrosion has proven to be a problem, GRI has developed an innov
pair technology that promises to reduce the need to replace pipe with critical
from general corrosion. A fiberglass-reinforced composite repair system has be
proved for use in pipe repair by the Department of Transportation under a bla
waiver granted on February 27. This fiberglass "bandaid" for pipe returns the
to its original strength without ever taking the pipe out of service.

For older pipeline systems which are experiencing the problems of coati
ration, GRI has developed and field tested a method of coating removal
the stringent regulatory requirements for environmental protection and occ
health and safety.

Automatic and Remotely Operated Mainline Valves. Public concern ha
cused industry attention on the use of automatic and remotely operated mai
valves to shut off gas flow after a pipeline rupture. Such valves have met with
ited acceptance by the pipeline industry. It is well understood that such val
not prevent the loss of gas between the valve and a pipe rupture. And such
cannot limit the potential for ignition. While useful for isolating the pipe ru
the industry has concerns over the reliability of automatic and remotely-o
valves, and the risk of inadvertent cut off of gas to customers. GRI has ide
some of the reasons why commercially-available line-break detection and co
systems often fail to operate when needed. Today's line break systems can o
reliably on single line systems operating away from major load centers. Ho
the reliability of line break systems is compromised in pipeline segments
to compressor stations and on complex piping systems, such as looped li
crossovers, operating near load centers. Load centers are concent ed in
ulated areas where there are many deliveries from the pipeline sys C is
investigating the technologies that might be developed to provide r oper
in these complex environments.

Risk Management. The natural gas pipeline industry is developing for n
ods of risk management to ensure the integrity of the pipeline system, t
reliable service to its customers and to increase the safety and efficiency of it
ations. Risk management is a decision making process for directing availabl
sources to those activities that offer the greatest potential for reducing risk an

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creasing pipeline safety. Risk management presents an alternative to prescriptive regulations that would treat all pipelines as being the same.

A key issue in pipeline risk management is the fact that the pipeline network is diverse. Existing pipeline systems include pipe of widely varying age and vintage, made from different manufacturing processes, installed using various procedures, protected against corrosion by different techniques, and operating in environments ranging from sub-zero temperatures in the North to desert heat in the Southwest, and located in areas varying from densely populated urban environments to sparsely populated rural regions. To implement an effective risk management program, the models, data analysis, and applications must be tailored to the specific requirements of each pipeline network.

To support the pipeline industry in its analysis, development, and use of risk management methodologies and practices, GRI compiled a review of risk assessment and risk management practices used worldwide, that pertain to the natural gas pipeline industry. This effort has included an analysis of those methodologies that could be used by the pipeline industry. Future GRI efforts will be to develop guidelines for use by pipeline companies in implementing risk management programs. The results will also support the efforts of the joint government/gas industry Risk Assessment Quality Team, established to foster cooperation and communication between the U.S. Department of Transportation Office of Pipeline Safety and the gas pipeline industry in the area of risk management.

Data Collection and Management. An important issue in the development of an effective risk management program is the availability of the operational and incident data needed to conduct an accurate risk assessment. Currently, the availability of such data is very limited. To address this issue, GRI is sponsoring the development of an Incident Reporting and Trending System (IRATS). IRATS will be a computer database that will collect, store and disseminate details of incidents reported to DOT involving both the transmission and distribution of natural gas.

A related issue in pipeline risk management is the need for a geographic information system (GIS) that would store the IRATS data, along with pipe location (mapping) data, operations and maintenance history, and any other important pipeline data in one common database. This database could then be used to provide critical information to support management decision making on risk management issues. The development of such a system, an Integrated Spatial Analysis Technique (ISAT), is currently being funded by GRI.

Risk Management Tools. Specific risk management tools are also needed by the industry. GRI is sponsoring the development of a Pipeline Inspection and Maintenance Optimization System (PIMOS) as a decision support system to help guide inspection and maintenance activities of natural gas pipelines. To ensure the greatest level of pipeline integrity, inspection and maintenance, maintenance and inspection activities must be focused on those segments of the pipeline network that would benefit most from such efforts. PIMOS will be used to evaluate a number of important pipeline integrity parameters and make recommendations for future inspection and maintenance activities.

PIPELINE MONITORING

Effective monitoring of pipeline condition can help operators identify changes in a pipeline (or its surroundings) early enough to take corrective action or make repairs. Unauthorized excavation by third parties leading to pipeline damage is by far the leading cause of pipeline failures.

Pipeline monitoring describes methods for inspecting the pipe and its right-of-way from above the ground. Current practice involves physically walking the line, aerial surveillance, measurements of electrical voltage on the pipe for corrosion control, and leakage surveys. Advanced technologies for monitoring pipeline conditions from aircraft or satellites are also being investigated. In the foreseeable future, pipeline operators should be able to reliably monitor, from airborne platforms, the electric current (also known as cathodic protection current) that protects pipelines from corrosion, while at the same time searching for pipeline leaks and providing accurate digital mapping information on pipe location and depth of cover. Although still in the early stages of development, satellite-based monitoring technologies are prime candidates for development as tools for monitoring.

COORDINATION OF THE GRI PROGRAM WITH INDUSTRY AND DOT

With the guidance and support of the natural gas pipeline industry, and it's board-level advisory bodies, GRI has developed a proactive research program designed to enhance pipeline safety. In the design and conduct of this program, GRI works with both industry and government. In addition to GRI's project advisors

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(from its member pipeline companies), GRI solicits input from the Interstat ral Gas Association of America (INGAA), the American Gas Association (. various regional natural gas associations, gas producers, and the Americar leum Institute (API). GRI research complements the research program of the Pipeline Research Committee and the research efforts of individual gas tra companies. GRI works cooperatively with the U.S. Department of Transpor fice of Pipeline Safety in the evaluation and improvement of advanced tec for improving the integrity and maintenance of pipeline systems. The mos example is the Department of Transportation's acceptance of the GRI-develo vanced composite repair system for pipelines described previously. GRI dressed issues of pipeline safety identified by the National Transportation Board (NTSB) and has sought practical and cost-effective solutions acceptab dustry and government.

Pipeline safety is the responsibility of both industry and government. A search arm of the natural gas industry, GRI accepts responsibility for bri best technology to the design, operation, and maintenance of natural gas systems for enhanced pipeline safety. The GRI program is responsive to thos of immediate concerns as well as issues that may arise in the future.

INGA
Washington, DC., March 22,

Hon. DAN SCHAEFER,
Chairman, Subcommittee on Energy and Power,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: During your Subcommittee hearing on pipeline March 9th, I said I would submit some information for the record on the a pipeline per mile of using a smart pig.

The cost of operating a smart pig varies greatly depending upon the locat configuration of the pipeline in question. In order to introduce the pig into t and get it back out, special above-ground traps have to be installed at bo of the section of pipes being inspected. In addition, factors such as pipe di the number and radius of turns in the pipe, and the location of the pipeline, ure into the cost of operating a smart pig. If the pipeline has to be modifie commodate a pig, cost per mile can range from $10,000 to $70,000. If the of pipe already has the necessary modifications, then the cost per mile is mately $1,500 to $3,000, depending upon pipe size, location, and the cos smart pig itself.

I hope this information is helpful to the Committee.

Sincerely,

LARRY D.
President and Chief Executive Officer, KN Energ

cc: Representative Frank Pallone

TEXAS EASTERN TRANSMISSION CORPORATION,
A UNIT OF PANHANDLE EASTERN CORPORATIO
Houston, TX, September 18,

Hon. DAN SCHAEFER,
Chairman, Subcommittee on Energy and Power,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: On behalf of Texas Eastern Transmission C r write to supplement the record of your March 9, 1995 subcommit Pipeline Safety with regard to the testimony of Mr. Larry D. Hall fo Natural Gas Association of America.

In his testimony, Mr. Hall indicated that the 1986 inline inspection cond the pipeline involved in the 1994 rupture in Edison, New Jersey would not l vealed the mechanical damage which has been determined to be the point o

The National Transportation Safety Board investigation of the incident i both the physical inspection of the subject pipe, as well as interviews w resentatives of Tuboscope Pipeline Services, the company that performed t inline inspection. The NTSB report on page 21 specifically notes that Tubos formed the NTSB investigators that the gouges found at the point of origin be expected to have significant signatures on the 1986 survey [and] no suc tures are visible." Based upon its investigation, the NTSB concluded at page

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"the gouge that ultimately resulted in pipe failure was caused by excavation activity some time after June 4, 1986," the date on which the inline inspection was conducted. Read in context, the record of the NTSB investigation and its conclusions confirm that had the mechanical damage that caused the rupture been present when the inline inspection was conducted in 1986, that condition would have been disclosed by the inspection.

Based upon the foregoing, Texas Eastern submits Mr. Hall's testimony before your Subcommittee on March 9, 1995 was based upon incomplete information. We would respectfully request therefore that the record be supplemented to reflect that both the NTSB and Texas Eastern hold the view that the 1986 inline inspection would have been effective in indicating the presence of the mechanical damage that caused the rupture had that damage occurred prior to the inspection.

We thank you for your courtesies and attention in this matter.

Respectfully yours,

H.D. CHURCH, *Senior Vice President.*

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